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IMPACT OF IMPORTED PETROLEUM PRODUCTS ON THE DOMESTIC PETROLEUM INDUSTRY

HEARING

BEFORE THE

SUBCOMMITTEE ON
ENERGY REGULATION AND CONSERVATION

OF THE

COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

NINETY-NINTH CONGRESS

FIRST SESSION

ON THE

IMPACT OF IMPORTED PETROLEUM PRODUCTS ON THE DOMESTIC PETROLEUM INDUSTRY

JUNE 4, 1985

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IMPACT OF IMPORTED PETROLEUM PRODUCTS ON THE DOMESTIC PETROLEUM INDUSTRY

TUESDAY, JUNE 4, 1985

U.S. SENATE,
SUBCOMMITTEE ON ENERGY REGULATION
AND CONSERVATION,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:36 a.m., in room SD-366, Dirksen Office Building, Hon. Don Nickles, presiding.

Present: Senators Nickles, Warner, Evans, Johnston, Ford, Bingaman, and Rockefeller.

Also present: Howard Unseem, professional staff member; and Benjamin S. Cooper, professional staff member for the minority.

OPENING STATEMENT OF HON. DON NICKLES, A U.S. SENATOR FROM THE STATE OF OKLAHOMA

Senator NICKLES. Good morning.

Today the Subcommittee on Energy Regulation and Conservation is holding an oversight hearing to review the impact of imported petroleum products on the domestic petroleum industry.

There is concern by major oil companies and independents alike that imports of petroleum products, gasoline in particular, are adversely affecting the domestic refining industry and U.S. energy security.

More than 100 U.S. refineries with a capacity of over 2.5 million barrels per day have shut down since 1981, and many others are now idle or running at partial capacity. Not only has this increased our dependence on foreign refiners, it has also thrown out of work several thousands of U.S. refinery employees, many of whom are in my State of Oklahoma.

I have seen several small refiners go out of business in the last several years, and it is my hope that this hearing will give us some understanding as to what the future of the domestic refining industry may entail.

At today's hearing we hope to examine several issues. One, what the trends of U.S. refining capacity are. Are those refineries that have closed and potentially will close obsolete and inefficient, or are they just failing to stand up to other refineries of other countries? How much capacity do we presently need in the domestic refining industry? At what point will a decline in U.S. refinery capacity have a material impact on the energy security of our country, and what are the trends in foreign refining capacity and how much is the additional new capacity for export? Additionally, we want to consider what impact will new foreign export capacity have on U.S. refiners? Also, are foreign countries subsidizing petroleum product exports?

And finally, and most importantly, what, if anything, should be done to assure that the United States has an adequate amount of refining capacity? What would be the cost and benefits of such action? Considered in that would be an oil import fee, tariffs, or whether we should have some import restrictions.

We have several outstanding witnesses today. I look forward to hearing their testimony. I'm also pleased that we have Senator Ford and Senator Bingaman join us today.

Senator Ford, do you have any opening comments?

Senator FORD. No. Let's just get on with it.

Senator NICKLES. Senator Bingaman, did you have any opening comments?

Senator BINGAMAN. I will submit my statement for the record.

[The prepared statement of Senator Bingaman follows:]

STATEMENT BY SENATOR JEFF BINGAMAN
Subcommittee on Energy Regulation and Conservation
The Impact of Imported Petroleum Products in the
Domestic Petroleum Industry
June 4, 1985

I commend the Chairman for holding this hearing today. It is an issue that has been ignored for too long and one that can have very serious future consequences. The impact of imported petroleum products raises important questions about our domestic refining industry and our nation's energy security.

I know it is clear to many members of this committee that imports of petroleum products--gasoline in particular, are hurting our domestic refining capacity. The statistics show that more than 100 U.S. refineries have shut down since 1981. Many other refineries have experienced significant slow downs in production. And, at this time, our current refining capacity is barely meeting domestic demand. The future trend is towards continually declining capacity and slowly increasing demand. This contraction of our industry poses real problems for this country.

As refineries close in the U.S. new refineries are built by the OPEC nations in an attempt to capture more of the value of their crude oil. The prices of these refined product imports are near or below what it costs U.S. refineries to purchase crude oil and refine it into petroleum products. This cost-price squeeze, the result of subsidization, makes refinery operations in the U.S. increasingly unprofitable. As more refineries close and our domestic capacity diminishes, my concern for these refined imports grow.

This hearing is important in determining not only the magnitude of the problem we face, but the remedies necessary to correct it. We must not wait for an emergency to occur before we take effective action.

There is much we can do. It is obvious the first step must be to identify at what point our declining refinery capacity poses an immediate concern to national security. We must set some realistic benchmark by which to measure when this point is reached.

Second, we must begin to consider the long-range impact foreign imports can have on our domestic industry and improve our system of trade remedies. This is especially true with respect to foreign government subsidization of national resource production. Currently, the Department of Commerce and the ITC are unable to effectively determine when there is a subsidy provided to industry by a foreign government or how to measure the extent of that subsidy.

Third, we must determine the most effective action to take once our threshold of vulnerability is reached. We must be prepared to impose quotas and tariffs as necessary to protect our energy security.

I hope this hearing will provide a thorough review of the problem of petroleum product imports and lead us to a clearer understanding of what action must be taken to solve the problem.

Senator Nickles. Our first two panelists that we have today are the Honorable Paula Stern, Chairwoman of the U.S. International Trade Commission, and also the Honorable Danny Boggs, Deputy Secretary of the U.S. Department of Energy.

Because we have a large number of panels and also the Senate will be in session in short order I'm going to ask all of our panelists if they would summarize their comments and keep their opening statements limited. And I'll also ask all of our panelists if we might be able to expedite our questions as well.

Mr. Boggs?

STATEMENT OF HON. DANNY J. BOGGS, DEPUTY SECRETARY, DEPARTMENT OF ENERGY

Mr. Boggs. Mr. Chairman, members of the committee, it's a pleasure to be able to testify before you today on questions concerning petroleum product imports and the situation of the U.S. refining industry.

I might begin by noting that the latest preliminary data from the Energy Information Administration on the first 3 months of 1985 indicate that imports of oil products are averaging about 1.8 million barrels per day, compared to the 1984 average of 2 million barrels per day, and an historic high of 3 million barrels per day experienced in 1973.

We also estimate current operable refining capacity to be about 15.6 million barrels per day, about equal to total domestic demand. It should also be noted that the output of U.S. refineries generally runs about half a million barrels a day greater than their input because of what is known as refinery gain, so that when we look at the product end of the market we have to look at that as well.

The problems which U.S. refiners have encountered are not unique. The rest of the free world is also confronted with excess refinery distillation capacity. Despite a reduction of nearly 9 million barrels per day since 1981, free world capacity of about 57 million barrels per day remains well in excess of current demand, which is only about 46 million barrels per day.

In my testimony, I discuss in some detail past trends and composition of product imports into the United States. I would summarize that briefly by noting that figure 1 displays total imports to the United States since 1949, which rose steadily through 1973 and then generally declined.

Looking at oil product exports, we have seen that they increased quite sharply since 1977, and so that by netting out the two; we find that in 1973 net product imports were 16 percent of our demand, but by 1984 had declined to only 9 percent.

My testimony also discusses the importance of adjusting for inventory changes when looking at short-run movements. For example, during the first 143 days of this year, as reported by EIA, our net product imports are down 35 percent from last year. Now that doesn't mean that our situation has changed radically, because we've been drawing down the inventory this year as opposed to last year. So we feel that it's important always to look at what's happening to inventory.

When you make that adjustment, you find that imports this year are running just about equal to last year's and that in fact, on that same measure, imports were almost exactly stable through each of the years from 1981 to 1984. What has happened is the composition of imports has shifted quite significantly.

The amount of import coming in the form of residual oil has dropped sharply. The amount in the form of gasoline has increased significantly from its previous level, but currently represents only about 5.5 percent of gasoline demand in the form of finished gasoline and blend stocks, and with a reasonable estimate of other stocks that may be being put into the gasoline stream could possibly be as high as 8 or 9 percent of U.S. gasoline consumption.

It's also important to look at the sources of our product imports. Table 2 shows the top 13 exporters to the United States over the last 4 years. None of those countries are in the Persian Gulf and most are in the Western Hemisphere. All of the OPEC countries together provided only 27 percent of our imported products, and a little over three percent of our demand. So it is evident that most of the oil product imports we currently use come from traditional sources and areas rather than the Persian Gulf.

The refining industry has obviously undergone ups and downs over the past decade. From 1973 to 1981, refining capacity grew sharply, aided by the entitlements program and other government programs, as well as by the substantial increase in petroleum demand. However, demand then went from a peak of 18.8 million barrels a day in 1978 to only 15.7 in 1984. Also, of course, price controls, and the entitlements program terminated.

But after 1979 the refinery industry found itself with a capacity greater than domestic consumption, a situation which had not existed at any time after 1962. A shakeout perhaps was inevitable and has occurred. Refineries with a total of 3 million barrels a day capacity have closed since 1981. Over the same period, capacity in Western Europe declined by 4 million barrels a day, a greater percentage than in the United States. Worldwide about 9 million barrels a day of capacity were shutdown, 3 million of that in the United States.

When viewed from this perspective, it is not difficult to understand the concerns that some members of the domestic refining industry are raising. Their problems are a reflection of the overcapacity and declining demand affecting the current profitability of oil industry operations worldwide. This situation is exacerbated by the recent development of new export-oriented refinery capacity in the Middle East and elsewhere.

If and when these new refineries come fully on stream, probably by 1987, they could add about 1 million barrels a day of product exports to the world supply levels. While adding to the already intense economic competition among the world's refiners, 1 million barrels, compared to an international oil market of nearly 50 million barrels is still quite small, and the increased product exports from these countries will not directly affect the total supply of crude.

Given a situation of world refinery overcapacity and sluggish demand, what should be the appropriate U.S. response? We do not believe the current situation justifies imposing additional restrictions on foreign imports. But, as Secretary Herrington has stated, "We will not allow domestic refinery capacity to get so low that our security is threatened. But we must also not deprive the American consumer of the benefits that result from free competition and lower prices."

I would note that if constraints were placed on oil product imports, we would need to import more crude oil to produce the additional products needed. Since Persian Gulf producers hold a significant proportion of shutin crude, much of the additional crude imports would probably come from these sources.

Since about 97 percent of our product imports now come from non-Persian Gulf sources, constraints on oil product imports would probably reduce supplies from these sources and lead to the situation, quite anomolously, of the U.S. increasing its direct dependence for oil supplies on the Persian Gulf. Such a substitution of additional crude imports from the gulf for product imports from non-Gulf sources would not enhance U.S. security.

In closing, I would like to comment briefly on what the Department is doing to continue to monitor the impact of world oil market conditions on the U.S. refining industry. In June of last year, we requested the National Petroleum Council to undertake a study of the factors affecting the domestic refining industry in the 1985 to 1990 timeframe. Among the issues to be addressed are the current and future impact of oil product imports. This study is expected to be completed by the year's end.

The Department is also currently working to extend its previous analysis in the refining industry. This study will also estimate the economic costs and benefits of protective measures such as an increased tariff on imported petroleum products, and we will submit a copy of this study as soon as it is completed.

We are also participating in an interagency study led by the U.S. Trade Representative and we are examining with interest the study presented by the International Trade Commission, which Chairman Stern will testify on later today.

This concludes my testimony, and at the appropriate time I would be happy to answer your questions.

[The prepared statement of Mr. Boggs follows:]

STATEMENT OF HON. DANNY J. BOGGS, DEPUTY SECRETARY, DEPARTMENT OF ENERGY

SENATOR NICKLES, GENTLEMEN, GOOD MORNING.

OVER THE PAST YEAR A NUMBER OF U.S. REFINERS HAVE RAISED CONCERNS ABOUT OIL PRODUCT IMPORTS TO THE U.S. AND THE IMPACT, REAL OR POTENTIAL, ON THEIR OPERATIONS. THESE REFINERS HAVE EXPRESSED CONCERNS OVER THE POSSIBLE USE OF UNFAIR TRADE PRACTICES BY OIL PRODUCT EXPORTING COUNTRIES AND THE POTENTIAL DETRIMENTAL IMPACT OF OIL PRODUCT IMPORTS ON OUR NATIONAL SECURITY.

BEFORE PROCEEDING TO A DETAILED DISCUSSION, LET ME SUMMARIZE THE CURRENT SITUATION REGARDING OIL PRODUCT IMPORTS AND REFINERY CAPACITY IN THE U.S..

THE LATEST PRELIMINARY DATA FROM EIA ON THE FIRST THREE MONTHS OF 1985 INDICATE THAT IMPORTS OF OIL PRODUCTS ARE AVERAGING ABOUT 1.8 MILLION BARRELS PER DAY COMPARED TO THE 1984 AVERAGE OF 2 MILLION BARRELS PER DAY AND THE HISTORIC HIGH OF 3 MILLION BARRELS PER DAY EXPERIENCED IN 1973. FURTHER, NET IMPORTS FOR THE FIRST 136 DAYS OF 1985 VS. 1984 ARE 917,000 BARRELS PER DAY VS. 1,663,000 RESPECTIVELY OR A 45% DECLINE. ALTHOUGH NET IMPORTS OF GASOLINE AND GASOLINE BLENDING COMPONENTS HAVE INCREASED IN RECENT YEARS, RISING FROM 180 THOUSAND BARRELS PER DAY IN 1981 TO ABOUT 380 THOUSAND BARRELS PER DAY IN 1984, THESE IMPORTS STILL REPRESENTED ONLY 5½ PERCENT OF TOTAL U.S. GASOLINE DEMAND IN 1984. FURTHERMORE, GASOLINE IMPORTS WERE OBTAINED FROM OVER 20 EXPORTING COUNTRIES, MOST OF WHOM ARE TRADITIONAL, NON-PERSIAN GULF SUPPLIERS OF OIL PRODUCTS TO THE U.S.

WITH RESPECT TO THE CURRENT STATUS OF U.S. REFINERY CAPACITY, IT IS NOW ADEQUATE TO MEET CURRENT U.S. DEMAND. THE ENERGY INFORMATION ADMINISTRATION ESTIMATES CURRENT OPERABLE REFINERY DISTILLATION CAPACITY IN THE 50 STATES TO BE ABOUT 15.6 MILLION BARRELS PER DAY, WHICH IS ABOUT EQUAL TO TOTAL DOMESTIC DEMAND. THE DIFFICULTIES EXPERIENCED BY DOMESTIC REFINERS IN RECENT YEARS HAVE BEEN CAUSED LARGELY BY THE CONTRACTION OF EXCESS CAPACITY. THIS CONTRACTION FROM EARLIER LEVELS IS DUE PARTLY TO THE ELIMINATION OF SUBSIDIES INHERENT IN THE OIL ENTITLEMENTS PROGRAM, AS WELL AS TO THE GENERAL DECLINE IN THE PRICE OF AND DEMAND FOR OIL PRODUCTS OVER THE PAST 4 YEARS. MORE RECENTLY, SPOT PRICES FOR GASOLINE HAVE INCREASED WHILE CRUDE PRICES HAVE NOT. THE COMBINATION OF THESE FACTORS IN THE PAST FEW MONTHS SHOULD HAVE LED TO SOME RELATIVE IMPROVEMENT IN THE ECONOMIC POSITION OF DOMESTIC REFINERS.

THE PROBLEMS WHICH U.S. REFINERS HAVE ENCOUNTERED ARE NOT UNIQUE. THE REST OF THE FREE WORLD IS ALSO CONFRONTED WITH EXCESS REFINERY DISTILLATION CAPACITY. DESPITE A REDUCTION IN DISTILLATION CAPACITY OF NEARLY 9 MILLION BARRELS PER DAY SINCE 1981, FREE WORLD REFINERY CAPACITY OF ABOUT 57 MILLION BARRELS PER DAY.REMAINS WELL IN EXCESS OF CURRENT FREE WORLD OIL DEMAND OF ABOUT 46 MILLION BARRELS PER DAY.

IMPORTS

IN ORDER TO PUT THIS ISSUE OF OIL PRODUCT IMPORTS AND DOMESTIC REFINERY DEVELOPMENT IN PERSPECTIVE, I WOULD LIKE TO BRIEFLY DESCRIBE SOME HISTORICAL TRENDS.

FIGURE 1 DISPLAYS TOTAL OIL PRODUCT IMPORTS TO THE U.S. FROM 1949 TO 1984. NOTE THAT OIL PRODUCT IMPORTS ROSE STEADILY FROM 1949 TO 1973 WHEN IMPORTS PEAKED AT JUST OVER 3 MILLION BARRELS PER DAY. SINCE THEN IMPORTS HAVE GENERALLY DECLINED AND IN 1984 WERE JUST ABOVE 2 MILLION BARRELS PER DAY. LOOKING NOW AT OIL PRODUCT EXPORTS, FIGURE 2, WE SEE THAT SINCE 1977 EXPORTS HAVE INCREASED SHARPLY, AVERAGING OVER TWICE THE LEVEL EXPERIENCED DURING THE 1960'S AND EARLY 1970'S. WHEN WE NET OUT EXPORTS WE FIND THAT U.S. DEPENDENCE ON OIL PRODUCT IMPORTS HAS DECREASED SIGNIFICANTLY OVER TIME, NOT INCREASED. IN 1973, NET OIL PRODUCT IMPORTS REPRESENTED ABOUT 16 PERCENT OF U.S. OIL DEMAND, BUT BY 1984 OIL PRODUCT IMPORTS' SHARE OF U.S. DEMAND DECLINED TO 9 PERCENT. THIS TREND IS DEPICTED IN FIGURE 3.

IN DISCUSSING DEPENDENCE ON OIL PRODUCT IMPORTS, ADJUSTMENT SHOULD BE MADE NOT ONLY FOR EXPORTS OF REFINED PRODUCTS, BUT ALSO FOR CHANGES IN INVENTORY. FOR EXAMPLE, IN THE WINTER WE MAY IMPORT 2 MILLION BARRELS PER DAY AND DRAW DOWN 1 MILLION FROM

STORAGE, WHILE IN SUMMER WE MAY IMPORT 4 MILLION BARRELS PER DAY AND PLACE 1 MILLION IN STORAGE. WHILE THE ABSOLUTE LEVEL OF IMPORTS DIFFERS BY A LARGE AMOUNT, THERE IS NO REAL DIFFERENCE IN DEPENDENCE ON IMPORTS: THE STOCK-ADJUSTED LEVEL IS 3 MILLION IN EITHER CASE. TABLE 1 DISPLAYS THIS ADJUSTMENT OF NET OIL IMPORTS FOR STOCK MOVEMENTS. NOTE THAT NET STOCK-ADJUSTED IMPORTS HAVE FALLEN MORE THAN 47 PERCENT SINCE 1973, DEMONSTRATING ONCE AGAIN THE DECLINING DEPENDENCE OF THE U.S. ON OIL PRODUCT IMPORTS. IN ADDITION, NET STOCK ADJUSTED IMPORTS HAVE REMAINED ESSENTIALLY LEVEL OVER THE PAST FOUR YEARS, VARYING BETWEEN 1.32 MILLION BARRELS PER DAY AND 1.39 MILLION BARRELS PER DAY ON AN ANNUAL BASIS. NET STOCK-ADJUSTED IMPORTS AS A PERCENTAGE OF TOTAL DOMESTIC PRODUCT SUPPLIED ARE SHOWN IN FIGURE 4. NET STOCK-ADJUSTED IMPORTS WERE 8.9% OF TOTAL DOMESTIC PRODUCT SUPPLIED IN THE TWELVE MONTHS ENDING FEBRUARY 1985, DOWN SIGNIFICANTLY FROM 14.4% IN THE TWELVE MONTHS ENDING APRIL 1974, WHILE SOMEWHAT ABOVE THE POST-1973 LOW OF 6.6% FOR THE TWELVE MONTHS ENDING JUNE 1980.

FOCUSING ON SPECIFIC PRODUCTS, WE SEE FROM FIGURE 1 THAT RESIDUAL FUEL OIL IMPORTS INCREASED FROM 1949 TO 1973 AND THEN DECLINED SIGNIFICANTLY FROM 1.85 MILLION BARRELS PER DAY IN 1973 TO 681 THOUSAND BARRELS PER DAY IN 1984, REFLECTING THE DECLINE IN THE

USE OF RESIDUAL FUEL OIL FOR ELECTRICITY GENERATION AND IN INDUSTRY. OVER THIS SAME PERIOD OF TIME, IMPORTS OF OTHER PRODUCTS EXPERIENCED A SLOW, UNEVEN GROWTH. FOR EXAMPLE, MOTOR GASOLINE AND MOTOR GASOLINE BLENDING STOCKS INCREASED FROM NEAR ZERO IN THE EARLY YEARS TO ABOUT 380 THOUSAND BARRELS PER DAY IN 1984. NEVERTHELESS, MOTOR GASOLINE AND ASSOCIATED BLENDING STOCK IMPORTS REPRESENTED ONLY ABOUT 5½ PERCENT OF TOTAL U.S. GASOLINE DEMAND IN 1984.

TURNING NOW TO THE SOURCES OF OIL PRODUCT IMPORTS, THE U.S. IMPORTS OIL PRODUCTS FROM OVER 30 COUNTRIES. TABLE 2 DISPLAYS THE IMPORTS OF TOTAL AND SELECTED PRODUCTS FROM THE TOP THIRTEEN EXPORTERS TO THE U.S. DURING THE YEARS 1981 THROUGH 1984. NONE OF THESE COUNTRIES ARE LOCATED IN THE PERSIAN GULF AND MOST ARE LOCATED IN THE WESTERN HEMISPHERE. NOTE THAT ONLY 3 OPEC MEMBERS ARE LISTED AMONG THE TOP THIRTEEN: VENEZUELA, ALGERIA, AND INDONESIA. THESE THREE CONTRIES, TOGETHER WITH ALL OTHER OPEC MEMBERS, PROVIDED ONLY 27 PERCENT OF ALL THE OIL PRODUCTS IMPORTED IN 1984, REPRESENTING A LITTLE OVER 3 PERCENT OF TOTAL DEMAND, WHILE U.S. TERRITORIES, CANADA, MEXICO, THE CARIBBEAN REFINERIES PROVIDED 50 PERCENT. WITH RESPECT TO GASOLINE IMPORTS, OPEC ACCOUNTED FOR OPEC EVEN LESS: 22 PERCENT OF IMPORTS IN 1984 (1 PERCENT OF U.S. GASOLINE DEMAND), WHILE THE U.S.

TERRITORIES, CANADA, MEXICO, AND CARIBBEAN REFINERIES SUPPLIED 36 PERCENT. THE ARAB OPEC COUNTRIES PROVIDED ONLY A THIRD OF OPEC'S SHARE OF GASOLINE AND ALL OTHER PRODUCT IMPORTS TO THE U.S.

IT IS EVIDENT FROM THE ABOVE THAT MOST OF THE OIL PRODUCT IMPORTS WE CURRENTLY RELY ON COME FROM TRADITIONAL SOURCES AND AREAS OTHER THAN THE PERSIAN GULF.

REFINERY CAPACITY

HOW HAS THE DOMESTIC REFINERY INDUSTRY EVOLVED DURING THIS TIME? IN 1973 U.S. REFINERY DISTILLATION CAPACITY AMOUNTED TO ABOUT 13.8 MILLION BARRELS PER DAY. IN THAT YEAR, DEMAND FOR OIL PRODUCTS AMOUNTED TO OVER 17 MILLION BARRELS PER DAY; WE NEEDED TO IMPORT PRODUCTS SIMPLY TO MEET DEMAND. AT THAT TIME, THE U.S. REFINING INDUSTRY, ANTICIPATING A CONTINUING GROWTH IN OIL DEMAND IN THE U.S., A PREDICTION SHARED BY MOST OTHER ECONOMIC FORECASTERS, BEGAN A MAJOR EXPANSION PROGRAM. STARTING IN 1974, DOMESTIC REFINERS WERE SUBSIDIZED BY DOMESTIC CRUDE OIL PRICE CONTROLS AND THE CRUDE OIL ENTITLEMENTS PROGRAM. LET ME EMPHASIZE THIS POINT, SINCE IT IS VERY IMPORTANT, BUT NOT WIDELY UNDERSTOOD. U.S. POLICY FROM 1974 TO 1981 TAXED REFINERS USING DOMESTIC OIL AND FORCED THEM TO SUBSIDIZE REFINERS USING IMPORTED OIL. THE SUBSIDY RAN IN BILLIONS OF DOLLARS EACH YEAR. THE NET RESULT WAS A LESS EFFICIENT REFINING INDUSTRY DEPENDENT ON

GOVERNMENT PROGRAMS. THE ENTITLEMENTS PROGRAM ALSO PROVIDED SMALL REFINERS AN ADDITIONAL ENTITLEMENT OF ABOUT $1.96 PER BARREL. THE EXPECTATION OF CONTINUED GROWTH IN DEMAND AND THE SMALL REFINERS BIAS CONTRIBUTED TO EXPANSION IN DOMESTIC REFINERY DISTILLATION CAPACITY TO OVER 18 MILLION BARRELS PER DAY BY 1981.

TABLE 3 PRESENTS THE NUMBER OF OPERABLE REFINERIES ACCORDING TO DISTILLATION CAPACITY. NOTE THAT BETWEEN 1981 AND 1985 OVER 100 REFINERIES WERE SHUT DOWN; OVER 60 OF THESE WERE SMALL REFINERIES' WITH CAPACITIES OF 30 THOUSAND BARRELS PER DAY OR LESS.

WHILE REFINERY CAPACITY WAS STILL GROWING, U.S. OIL DEMAND BEGAN TO DECLINE IN RESPONSE BOTH TO THE CRUDE OIL PRICE INCREASES IMPOSED BY OPEC IN 1979 AND THE ECONOMIC RECESSION WHICH BEGAN IN THAT YEAR IN THE U.S. AND THE REST OF THE WORLD. U.S. DEMAND WENT FROM A PEAK OF 18.8 MILLION BARRELS PER DAY IN 1978 TO 15.7 MILLION BARRELS PER DAY IN 1984. ADDITIONALLY, DOMESTIC PRICE CONTROLS TERMINATED JANUARY 1981 ALONG WITH THE ENTITLEMENTS PROGRAM. AFTER 1979, THE DOMESTIC REFINERY INDUSTRY FOUND ITSELF WITH REFINERY CAPACITY GREATER THAN DOMESTIC CONSUMPTION, A SITUATION WHICH HAD NOT EXISTED SINCE 1962.

THIS EXCESS GREW AS NEW CAPACITY CAME ON LINE THROUGH 1981 AND OIL DEMAND CONTINUED ITS DECLINE. A SHAKEOUT WAS INEVITABLE AND IT HAS OCCURRED. REFINERIES WITH A TOTAL OF 3 MILLION

BARRELS PER DAY CAPACITY HAVE CLOSED SINCE 1981, RESULTING IN A CURRENT DISTILLATION CAPACITY LEVEL OF ABOUT 15.6 MILLION BARRELS PER DAY. OVER THIS SAME PERIOD, DISTILLATION CAPACITY IN WESTERN EUROPE DECLINED BY JUST OVER 4 MILLION BARRELS PER DAY--20 PERCENT VS. 16 PERCENT IN THE U.S.

A POSITIVE ASPECT OF THE U.S. TREND HAS BEEN THE INCREASE IN REFINERY FLEXIBILITY AND DOWNSTREAM CONVERSION. THE U.S. NOW HAS THE MOST SOPHISTICATED REFINERY INDUSTRY IN THE WORLD. THE INDUSTRY IS CAPABLE OF PRODUCING A GREATER PROPORTION OF LIGHTER OIL PRODUCTS FROM A HEAVIER GRADE OF CRUDE OIL FEEDSTOCK, THAN THE REFINING INDUSTRY OF ANY OTHER COUNTRY.

CLEARLY, THE PROBLEMS DOMESTIC REFINERS EXPERIENCED IN RECENT YEARS WERE PRIMARILY THE RESULT OF OVEREXPANSION RELATIVE TO DEMAND, INCLUDING THE EXPANSION OF SMALL, LESS EFFICIENT UNITS AND SOME CORRECTION WAS NECESSARY.

AS I NOTED BRIEFLY ABOVE, THIS PROBLEM OF OVERCAPACITY WAS NOT UNIQUE TO THE U.S., BUT OCCURRED WORLDWIDE.

REFINERY DISTILLATION CAPACITY IN THE FREE WORLD CLIMBED FROM ABOUT 54 MILLION BARRELS PER DAY IN 1973 TO ABOUT 66 MILLION BARRELS PER DAY BY 1980 AND THEN DECLINED TO ABOUT 57 MILLION BARRELS PER DAY TODAY. DURING THAT TIME, WORLD OIL DEMAND ROSE

FROM 48 MILLION BARRELS PER DAY IN 1973 TO 52 MILLION BARRELS PER DAY IN 1979, THEN DECLINED TO ABOUT 46 MILLION BARRELS PER DAY IN 1984. IN WESTERN EUROPE, REFINERY DISTILLATION CAPACITY DECLINED FROM JUST OVER 20 MILLION BARRELS PER DAY IN 1981 TO ABOUT 16 MILLION BARRELS PER DAY BY THE END OF 1984; IN THE CARIBBEAN, REFINERY DISTILLATION CAPACITY WENT FROM ABOUT 2.8 MILLION BARRELS PER DAY TO A LITTLE OVER 2 MILLION BARRELS PER DAY BY THE END OF 1984. THUS, BETWEEN 1980 AND 1984 ABOUT 9 MILLION BARRELS PER DAY OF DISTILLATION CAPACITY WERE SHUT DOWN WORLDWIDE, OF WHICH 3 MILLION BARRELS PER DAY WERE IN THE U.S.

WHEN VIEWED FROM THIS HISTORICAL PERSPECTIVE, IT IS NOT DIFFICULT TO UNDERSTAND THE CONCERNS THAT MEMBERS OF THE DOMESTIC REFINERY INDUSTRY ARE RAISING. THEIR PROBLEMS ARE A REFLECTION OF THE OVERCAPACITY AND DECLINING DEMAND AFFECTING THE CURRENT PROFITABILITY OF OIL INDUSTRY OPERATIONS WORLDWIDE.

ALTHOUGH REFINER MARGINS MAY HAVE IMPROVED AS A RESULT OF PRICE STRENGTHENING OF SOME OIL PRODUCTS IN RECENT MONTHS, THE REFINING INDUSTRY IS STILL FACED WITH OVERCAPACITY.

THIS SITUATION IS EXACERBATED BY THE RECENT DEVELOPMENT OF NEW EXPORT ORIENTED REFINERY CAPACITY IN THE MIDDLE EAST, PRIMARILY IN SAUDI ARABIA, KUWAIT, AND IN LIBYA.

A number of U.S. refiners have raised concerns regarding oil product imports from the new export oriented refineries in the Middle East, and North Africa. If they are fully on stream by 1987, these additional refineries could add about 1 to 1.2 million barrels per day of oil product exports to world oil supply in addition to 1984 levels. While adding to the already intense economic competition occurring today among the world's refiners, the share of the international oil market that these new exports can take will still be quite small. Moreover, increased product exports from these countries will not directly affect the total supply of crude.

According to a recent study done for DOE by the East-West Center in Hawaii, the natural markets for these products will be Europe and the Far East. Transportation cost differentials make the U.S. a less attractive market for these products. These new refineries may well intensify competition and lead to some additional refinery closures worldwide. An additional export increment of a little over 1 million barrels per day should not be seen as posing a fundamental problem to the World and the U.S. Such an increment represents about 3 percent of current total free world oil demand of about 46 million barrels per day.

LET ME ADD THAT THE DECISION BY THE MIDDLE EAST COUNTRIES TO EXPAND THEIR OIL PRODUCT EXPORT POTENTIAL OCCURRED IN THE MID 1970'S WHEN IT SEEMED THAT EVERY ONE THOUGHT THAT OIL DEMAND WOULD RISE INEXORABLY, REGARDLESS OF COST. THEY TOO ARE TAKING INTO ACCOUNT THE NEW REALITIES OF THE MARKET PLACE AS EVIDENCED BY THE RECENT DECISION OF SAUDI ARABIA TO POSTPONE INDEFINITELY CONSTRUCTION OF TWO NEW REFINERIES WITH 325 THOUSAND BARRELS PER DAY OF REFINERY CAPACITY.

GIVEN A SITUATION OF WORLD REFINERY OVERCAPACITY AND SLUGGISH DEMAND, WHAT SHOULD BE THE APPROPRIATE U.S. RESPONSE?
AS YOU KNOW, THIS ADMINISTRATION SUPPORTS FREE TRADE. IN PRINCIPLE, WE DO NOT BELIEVE THAT IT IS IN THE BEST INTERESTS OF THE U.S. TO INSULATE ANY SECTOR OF THE U.S. MARKET FROM INTERNATIONAL TRADE. EXPERIENCE HAS SHOWN THIS TO BE THE BEST POLICY. RATHER THAN SEEKING TO PROTECT U.S. REFINERS FROM OIL PRODUCT IMPORTS, WE ARE ENCOURAGING THE ELIMINATION OF TRADE BARRIERS IN OTHER COUNTRIES TO ALLOW THE MARKET TO DICTATE THE MOST EFFICIENT ABSORPTION OF OIL PRODUCT IMPORTS. WE DO NOT BELIEVE THE CURRENT SITUATION JUSTIFIES IMPOSING ADDITIONAL RESTRICTION ON FOREIGN IMPORTS. AS SECRETARY HERRINGTON HAS STATED, "WE WILL NOT ALLOW DOMESTIC REFINERY CAPACITY TO GET SO LOW THAT OUR SECURITY IS THREATENED, BUT WE MUST ALSO NOT DEPRIVE THE AMERICAN CONSUMER OF THE BENEFITS THAT RESULT FROM FREE COMPETITION AND LOWER PRICES."

WE HAVE CARRIED THIS MESSAGE TO OUR PARTNERS IN THE ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT AND WITHIN THE INTERNATIONAL ENERGY AGENCY, IN MEETINGS BOTH HERE AND ABROAD. THEY ARE LISTENING AND LOOKING TO US FOR LEADERSHIP IN THIS MATTER. I MUST EMPHASIZE THAT IF, CONTRARY TO OUR BEST INTERESTS, THE U.S. PURSUES PROTECTIONIST MEASURES ON OIL PRODUCT IMPORTS, OTHER COUNTRIES ARE LIKELY TO ADOPT SIMILAR MEASURES, LEADING TO GREATER INEFFICIENCIES AND INCREASED COST TO ALL CONSUMERS. PROTECTIONIST PRESSURES ON PETROLEUM PRODUCTS BY THE U.S. AND OTHER COUNTRIES COULD SPILL OVER TO TRADE IN OTHER PRODUCTS.

WE BELIEVE THERE IS NO REASON FOR CURRENT ALARM BASED ON THE TRENDS THAT ARE VISIBLE AT THIS TIME. TO BEGIN WITH, OUR LEVEL OF DEPENDENCE ON OIL PRODUCT IMPORTS IS SIMPLY NOT THAT GREAT. AS I PREVIOUSLY NOTED, IN 1984 NET OIL PRODUCT IMPORTS ACCOUNTED FOR ONLY 9 PERCENT OF OUR TOTAL OIL DEMAND WHILE GASOLINE IMPORTS ACCOUNTED FOR ONLY 5½ PERCENT OF OUR GASOLINE DEMAND. SECONDLY, THE U.S. TRADITIONALLY IMPORTS PRODUCTS FROM MANY COUNTRIES. IN 1984 OIL PRODUCTS WERE OBTAINED FROM OVER 30 COUNTRIES. SUCH DIVERSIFICATION PROMOTES NATIONAL SECURITY BY AVOIDING DEPENDENCE ON A SMALL NUMBER OF UNSTABLE SOURCES. THIRD, WE HAVE SUBSTANTIAL DOMESTIC REFINING CAPACITY WHICH IS ABOUT EQUAL TO CURRENT CONSUMPTION. FURTHER, IF THERE WERE A SEVERE INTERRUPTION, CRUDE WOULD LIKELY BE IN SHORT SUPPLY RATHER THAN PRODUCT.

FINALLY, IF CONSTRAINTS WERE PLACED ON OIL PRODUCT IMPORTS, THIS WOULD BE AN INTERVENTION BY THE U.S. GOVERNMENT INTO THE MARKETPLACE. FURTHER, WE WOULD NEED TO IMPORT MORE CRUDE OIL TO PRODUCE THE ADDITIONAL PRODUCTS NEEDED. SINCE PERSIAN GULF PRODUCERS HOLD A SIGNIFICANT PROPORTION OF SHUT-IN CRUDE OIL PRODUCTION, MUCH OF THE ADDITIONAL CRUDE OIL IMPORTS WOULD PROBABLY HAVE TO COME FROM THESE SOURCES. ADDITIONALLY, SINCE ABOUT 97% OF OUR OIL PRODUCT IMPORTS COME FROM NON-PERSIAN GULF SOURCES, ANY CONSTRAINTS ON OIL PRODUCT IMPORTS WOULD PROBABLY REDUCE SUPPLIES FROM THESE SOURCES, LEADING TO THE ANOMALOUS SITUATION OF THE U.S. INCREASING ITS DIRECT DEPENDENCE FOR OIL SUPPLIES ON PERSIAN GULF SOURCES.

SUCH A SUBSTITUTION OF ADDITIONAL CRUDE IMPORTS FROM THE PERSIAN GULF FOR OIL PRODUCT IMPORTS FROM NON-PERSIAN GULF SOURCES WOULD NOT ENHANCE U.S. SECURITY.

BEFORE CLOSING, I WOULD LIKE TO COMMENT BRIEFLY ON WHAT IS BEING DONE TO CONTINUE TO MONITOR THE IMPACT OF WORLD OIL MARKET CONDITIONS ON THE U.S. REFINING INDUSTRY. THE DEPARTMENT OF ENERGY IN JUNE OF LAST YEAR REQUESTED THAT THE NATIONAL PETROLEUM COUNCIL UNDERTAKE A STUDY OF THE FACTORS AFFECTING THE DOMESTIC REFINING INDUSTRY IN THE 1985-1990 TIMEFRAME. AMONG THE ISSUES TO BE ADDRESSED ARE THE CURRENT AND FUTURE IMPACT OF OIL PRODUCT IMPORTS. THIS STUDY IS EXPECTED TO BE COMPLETED BY YEAR END.

ADDITIONALLY, THE DEPARTMENT IS CURRENTLY WORKING TO EXTEND ANALYSIS OF CURRENT AND FUTURE CONDITIONS IN THE DOMESTIC REFINING INDUSTRY. THE STUDY ALSO WILL ESTIMATE THE ECONOMIC COSTS AND BENEFITS OF A PROTECTIVE MEASURE, SUCH AS AN INCREASED TARIFF ON IMPORTED PETROLEUM PRODUCTS. THE STUDY IS SCHEDULED TO BE COMPLETED IN JUNE. WE WILL SUBMIT A COPY OF THE STUDY AS SOON AS IT IS COMPLETED.

THE DEPARTMENT IS ALSO PARTICIPATING IN A STUDY OF THE TRADE ASPECTS OF OIL PRODUCT AND PETROCHEMICAL IMPORTS. THIS IS AN INTERAGENCY STUDY BEING LED BY THE OFFICE OF THE U.S TRADE REPRESENTATIVE. THE PURPOSE OF THIS STUDY IS TO INCREASE OUR UNDERSTANDING OF WHAT IS HAPPENING AND WHY. IN ADDITION, I UNDERSTAND THAT THE INTERNATIONAL TRADE COMMISSION HAS RECENTLY COMPLETED A STUDY AT THE REQUEST OF CONGRESSMAN GIBBONS AND OTHERS ON THE POTENTIAL IMPACT OF FOREIGN GOVERNMENTS' POLICIES OF PRICING NATURAL RESOURCES TO THEIR DOMESTIC INDUSTRIAL USERS AT PRICES BELOW THE EXPORT SELLING PRICE OF THE NATURAL RESOURCES.

AS I UNDERSTAND IT, THE PRIMARY PURPOSE OF THE ITC STUDY WAS TO EVALUATE WHETHER IMPORTS OF PRODUCTS, INCLUDING OIL PRODUCTS, WHICH HAVE BEEN PRODUCED FROM PRICE- CONTROLLED NATURAL RESOURCES CONFERS A COMPETITIVE, AND POSSIBLY UNFAIR, ADVANTAGE TO THE EXPORTER WHEN COMPARED TO THE COST OF PRODUCTION OF THAT PRODUCT IN THE U.S.

WHILE THESE STUDIES WILL PROVE INFORMATIVE AND WILL HELP US CONTINUE TO MONITOR THE IMPACT OF PETROLEUM PRODUCT IMPORTS ON THE U.S. REFINERY INDUSTRY, I WANT TO POINT OUT THAT IT IS INDUSTRY'S RESPONSIBILITY TO PRESENT ITS CASE IF IT BELIEVES THAT UNFAIR TRADE PRACTICES ARE INVOLVED. IF U.S. REFINERS BELIEVE THAT UNFAIR TRADE PRACTICES ARE INVOLVED IN THE PARTICULAR SITUATION OF THE EXPORT OF OIL PRODUCTS TO THE U.S., I URGE THAT THEY PRESENT THEIR ARGUMENTS TO THE APPROPRIATE AGENCIES OF THE U.S. GOVERNMENT AS SOON AS POSSIBLE SO THAT WE MAY REVIEW THE EVIDENCE.

THIS CONCLUDES MY TESTIMONY, I WOULD BE HAPPY TO ANSWER ANY QUESTIONS YOU MAY HAVE.

Figure 1. Imports of Petroleum Products, 1949-1984

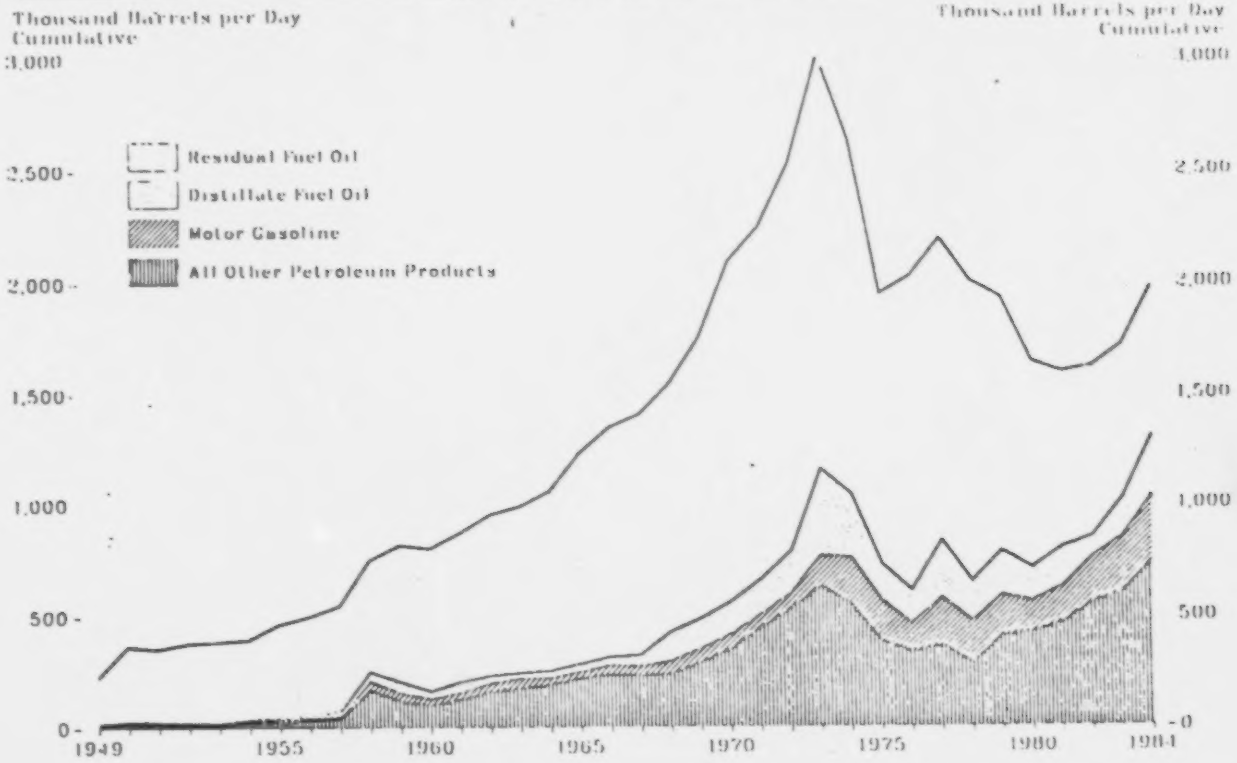
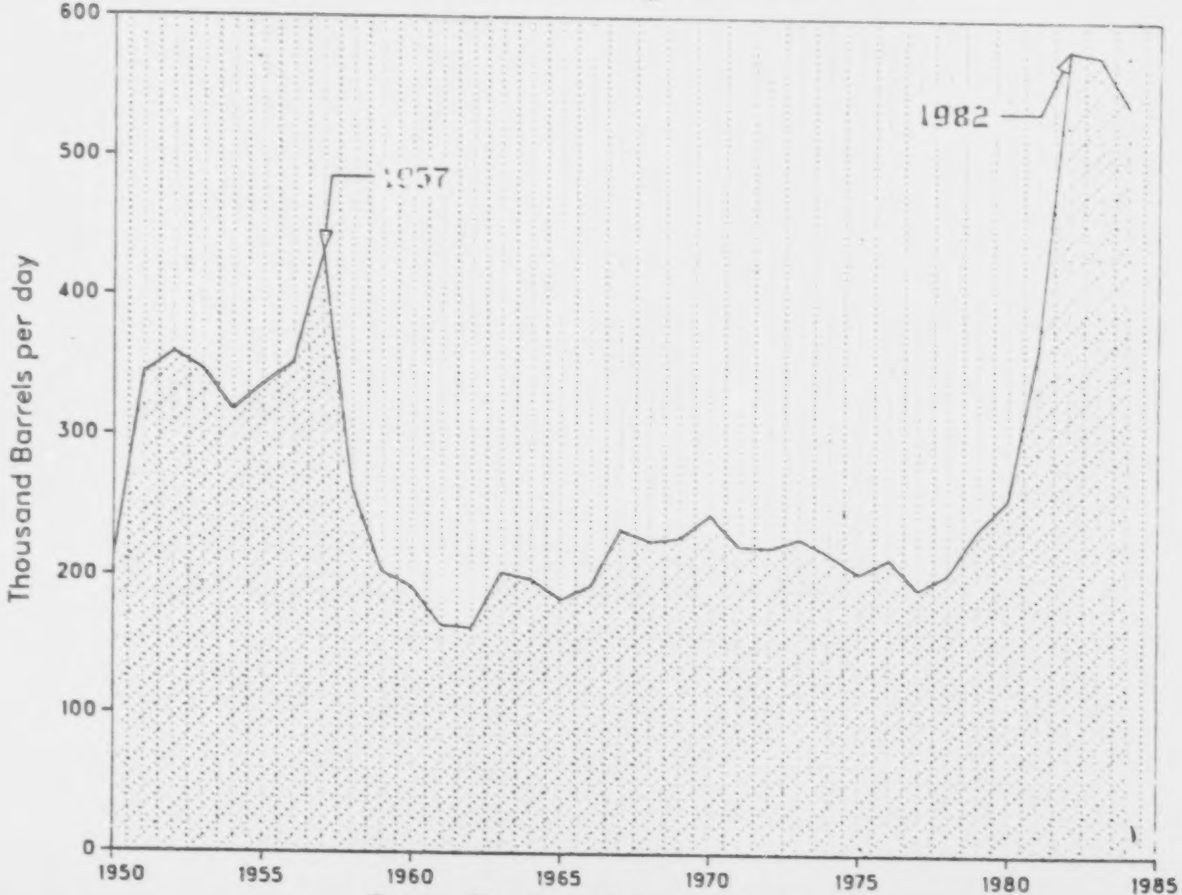


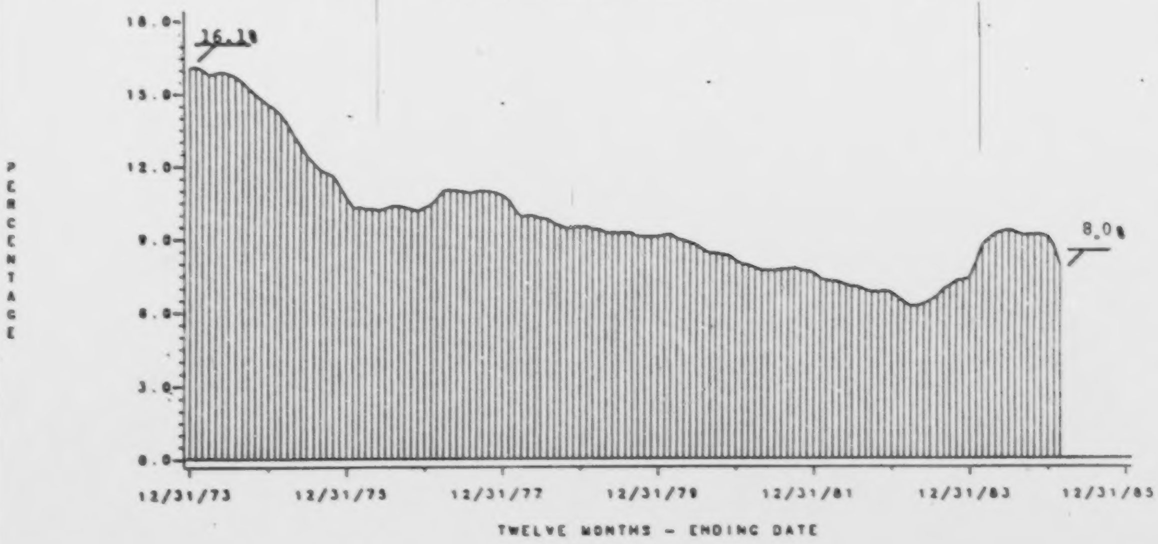
FIGURE 2 United States
Petroleum Product Exports
Annual Average 1950–1984



Source:EIA, Annual Energy Review, 1984

FIGURE 3

U.S. NET IMPORTS OF PETROLEUM PRODUCTS
AS A PERCENTAGE OF
TOTAL DOMESTIC PETROLEUM PRODUCTS SUPPLIED, 1973–1985
(Rolling Twelve-Month Average)



Source: Data used in preparing the Monthly Energy Review issue dated January 1985 (published in April 1985) obtained from the Monthly Energy Data System (MEDS). Energy Information Administration.

Table 1

Product Imports Adjusted for Stock Movements
(Thousand Barrels/Day)

Year	Product Imports	Product Exports	Stock Withdrawal 1/	Net-Stock Adjusted Imports 2/
1973	3,012	229	-146	2,637
1974	2,635	218	-117	2,300
1975	1,951	204	-145	1,602
1976	2,026	215	96	1,907
1977	2,193	193	-378	1,624
1978	2,008	204	172	1,976
1979	1,937	237	-25	1,675
1980	1,646	258	-42	1,346
1981	1,599	367	130	1,362
1982	1,625	579	283	1,329
1983	1,722	575	234	1,381
1984	2,011	541	-81	1,389

1/ A negative number indicates an increase in stock and a positive number indicates a decrease.

2/ Product Imports less product exports plus stock withdrawals.

Source: EIA

Table 2 Imports of Oil Products by Country
(Thousand Barrels)

	Total Products				Gasoline 1/				Residual Fuel Oil			
	1981	1982	1983	1984	1981	1982	1983	1984	1981	1982	1983	1984
Virgin Islands	119,365	115,300	107,969	107,645	20,225	21,723	20,113	17,910	52,919	44,624	42,899	48,753
Canada	103,301	97,073	99,567	105,837	6,133	7,460	9,453	7,195	14,196	8,885	9,875	9,281
Venezuela	94,620	93,881	94,182	107,840	380	3,077	15,055	21,703	78,745	74,502	56,220	42,966
Neth Antilles	71,974	83,806	68,916	68,812	1,559	2,080	1,815	6,823	61,187	51,015	44,495	43,877
Bahamas	27,081	23,667	45,581	32,364	0	0	433	0	12,489	12,555	12,389	8,858
Puerto Rico	22,647	18,150	14,498	15,210	9,568	8,405	5,062	4,633	822	231	0	74
Mexico	19,348	14,075	21,959	32,773	2	0	3,381	8,430	11,478	7,830	7,049	3,302
Algeria	18,198	29,223	23,268	47,186	0	480	0	833	15,427	28,158	17,765	21,199
Indonesia	17,520	8,323	8,332	14,241	3,080	2,381	2,000	1,354	11,251	3,243	4,928	5,946
Trinidad/Tobago	11,363	7,415	4,912	2,581	576	231	97	111	7,118	5,748	3,789	1,929
Netherlands	10,896	12,727	22,838	22,630	6,122	9,342	13,282	10,134	1,132	1,310	1,657	1,421
Mainland China	6,631	11,021	10,205	11,255	5,956	10,368	9,312	4,937	0	105	81	0
Brazil	3,417	10,269	14,304	22,032	71	3,494	6,473	10,005	3,239	8,485	7,424	10,876
All Others	57,354	68,214	96,987	145,581	12,233	18,279	20,691	40,558	22,067	36,420	46,642	50,729
TOTAL	583,716	593,144	628,518	735,987	65,906	87,320	107,176	139,646	292,070	283,101	255,213	249,211

1/ Includes motor fuel blending stocks.

Source: EIA Data

Table 3

Number of Operable U.S. Refineries by Size

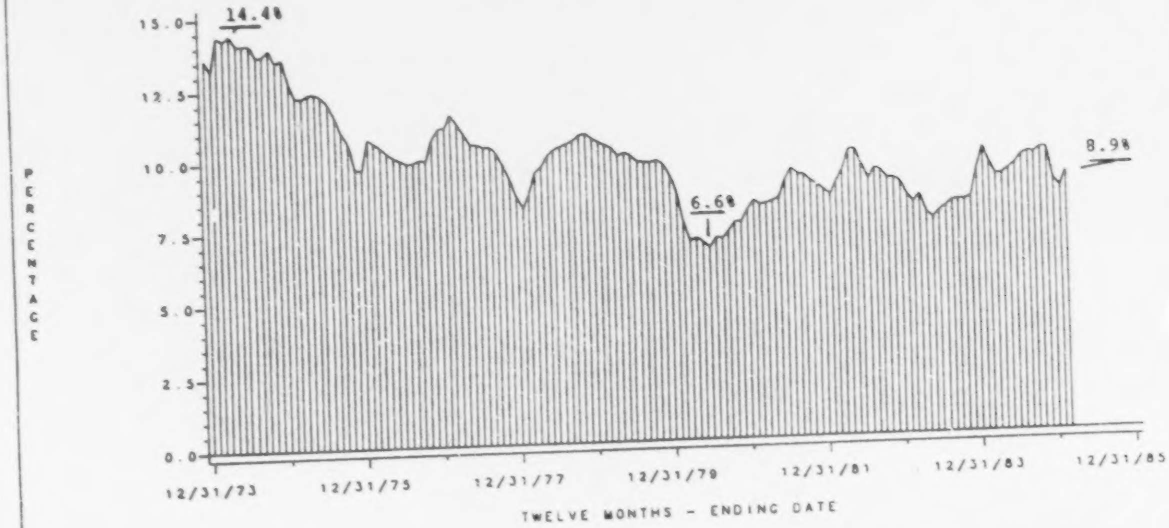
Crude Oil Distillation Capacity, Barrels Per Calendar Day	YEARS															
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Less than 10,000	113	110	109	107	105	103	101	100	102	102	102	91	82	67	63	56
10,001 - 30,000	60	61	63	58	62	60	59	60	67	78	83	93	80	59	55	43
30,001 - 50,000	40	34	32	32	32	40	38	39	42	38	39	42	44	40	41	38
30,001 - 100,000	36	38	39	41	42	42	47	46	42	44	44	44	43	44	41	39
100,000 - 175,000	19	21	22	23	23	24	21	22	25	25	25	27	30	26	26	25
Over 175,000	13	13	16	16	19	20	21	24	24	24	26	27	22	22	21	22
Total	281	279	281	277	283	289	287	291	302	311	319	324	301	258	247	223

Source: 1970-1979 data from the U.S. Department of the Interior, Bureau of Mines, Mineral Industry Surveys, Petroleum Refineries in the United States and Puerto Rico, January 1, for each year used: data from 1980 through 1984 from Energy Information Administration, Petroleum Supply Annual 1984, Vol. 1, May 1985.

FIGURE 4

U.S. NET IMPORTS OF PETROLEUM PRODUCTS (STOCK–ADJUSTED) AS A PERCENTAGE OF TOTAL DOMESTIC PETROLEUM PRODUCTS SUPPLIED, 1973–1985

(Rolling Twelve-Month Average)



Source: Data used in preparing the Monthly Energy Review issue dated January 1985 (published in April 1985), obtained from the Monthly Energy Data System (MEDS), Energy Information Administration.

Senator NICKLES. Thank you very much, Mr. Boggs.

Dr. STERN.

STATEMENT OF HON. PAULA STERN, CHAIRWOMAN, INTERNATIONAL TRADE COMMISSION

Dr. STERN. Good morning, Mr. Chairman and members of the committee. It's a pleasure to testify before this hearing on petroleum imports.

As you know, we at the International Trade Commission have done two studies, not just one, related to this issue and, of course, we administer statutes offering potential relief to domestic industries feeling that they have been injured by imports. I will discuss with you all this morning just the two studies, and then leave open the possibility of discussing the statutory laws that we administer for potential relief for industries feeling they have been injured.

Many U.S. industry officials, as well as other informed observers, are concerned over certain foreign governments' policies of making natural resource products available to their domestic industrial users at prices substantially below what they could sell them for on the open market. If natural resources such as crude petroleum are sold or transferred to industrial users within the producing country at a preferential price, this practice could then convey a competitive advantage to the industrial users.

This energy or raw material advantage in turn could enable these industrial users to displace downstream products of other producing countries in their own traditional markets. Now as a result of U.S. imports of energy-intensive products such as ammonia, carbon black, and cement, domestic interest in this matter has grown sharply in the last 2 years, and this hearing is a further culmination of that trend.

It's been alleged over the last couple of years that these products—ammonia, carbon black, and cement, for example—are in effect subsidized. This is a general layman's term, not the legal term the Department of Commerce uses, but the allegation is that there's been subsidization because of this dual pricing policy for petroleum and natural gas. The alleged subsidy would be equal to the difference between the internal transfer price and the export selling price or other market value of the energy products.

However, the U.S. Department of Commerce, which is separate and apart from the International Trade Commission, has ruled that under current U.S. law, foreign government programs that are available to all industries in the foreign country are not—are not unfair practices. Thus, under current U.S. law, as interpreted by the Department of Commerce, the preferential pricing of petroleum and natural gas for internal use is not a subsidy which the U.S. Government is willing to countervail against with a duty.

A recent Commission study provides detailed coverage of the pricing policies and practices of a number of foreign governments. Areas of analysis that we covered in our study include the foreign production cost savings conferred by such pricing policies, the competitive advantages of such cost savings vis-a-vis U.S. producers, and the effect of such policies on resource allocation within the foreign country.

The Commission found in its study that a formal written government policy for dual pricing of crude petroleum existed in only a few of the over 45 nations that we studied. However, evidence indicates that less formal dual-pricing practices exist in many of the crude petroleum-rich nations.

The table on page 4 of my formal statement presents in summary form the information collected on these pricing policies or practices. As you can see, while the crude petroleum export price was $29 per barrel, for example, last year, industrial users in Mexico, for example, could obtain crude at an estimated cost of $6 to $7 per barrel; in Saudi Arabia, for $3 to $6 per barrel; in Venezuela for $6 to $8; in the People's Republic of China, for $5 to $7; and in the Soviet Union for between $4 and $6.

Now how will the availability of low-cost resources affect the price of petroleum products sold here in the U.S. market? I can only address this indirectly, because obviously market conditions at any point in time will determine the specific effect on product prices.

But in general the difference between the production costs of foreign and U.S. producers can confer competitive advantage to the foreign producer in at least three ways. First, it may be retained as additional profit, which would enable the foreign producer to invest more heavily in research and development or new, more efficient production facilities.

Second, it might provide additional pricing leverage to enable the foreign producer to discount its product in order to gain market share or to penetrate new markets. Third, it can enable the foreign producer to defray transportation or other costs to markets that it could not reach otherwise on a competitive basis.

The table on page 8 of my formal statement gives examples of U.S. and foreign production costs for certain commodities, including base petrochemicals and petroleum products. Estimated fuel feedstock production costs for the production of ammonia, coming from that table 8, for example, were between $20 and $67 for a short ton in Mexico, while they average between $71 and $114 in the United States.

Looking at the differential between Saudi Arabia and the United States, we see that fuel feedstock production costs for petroleum products average between $3 and $6 per barrel, while similar production costs in the United States average between $28 and $29 per barrel.

The value of U.S. imports measured by dollars, not by barrels, of petroleum products has increased from $11.4 billion in 1980 to $18.6 billion in 1984. U.S. imports of petroleum products could increase further as additional refining capacity comes on stream in the OPEC nations and in other energy-rich nations.

The other Commission study indicates that the duty rate assessed on motor fuel blending stocks can vary widely, depending upon the composition, chemical composition of the products. The International Trade Commission therefore recommended in its study that was presented to both the Finance Committee and the House Ways and Means Committee that these materials be classified by end use.

The main advantage of a tariff item combining all motor fuel blending stocks is that it would require only a certification by the importer of the intended end use of the imported material; a technical definition to distinguish motor fuel blending stocks from other mixtures would not be necessary in that case.

Such a provision, using an end use basis, should encompass all future imports of materials to be used as blending components for motor fuels.

That completes my brief overview of the two studies which we have recently delivered to the Congress, and I, as I said, would be happy to discuss the statutory relief which is available presently under the law which the International Trade Commission administers to industries feeling that they have been injured by imports.

[The prepared statement of Dr. Stern follows:]

Paula Stern

Statement for the Committee on Energy
and Natural Resources, Subcommittee
on Energy Regulation and Conservation
Tuesday, June 4, 1985

Report to the Committee on Energy and Natural Resources, Subcommittee on Energy Regulation and Conservation, U.S. Senate, on Recent U.S. International Trade Commission Studies on Natural Resource Pricing and Motor Fuel Blending Stocks

Good morning, Mr. Chairman and members of the Subcommittee. It is a pleasure to testify before this hearing on petroleum imports.

The U.S. International Trade Commission, which I chair, was created by Congress in 1975 as a successor to the U.S. Tariff Commission which was established by Congress in 1916. It is an independent, bipartisan, quasi-judicial agency with broad powers to investigate all factors relating to the effect of U.S. foreign trade on domestic production, employment, and consumption.

Although not charged with a policymaking role, the Commission contributes substantially to the development of sound, equitable international trade policy by conducting factfinding studies to aid the Administration and Congress. These studies are conducted under section 332 of the Tariff Act of 1930, which provides broad authority to investigate trade-related matters. They are usually initiated by a request from the President, the House Ways and Means Committee, the Senate Finance Committee, either branch of Congress, or on the Commission's own motion.

Two recent Commission studies carried out under section 332 authority may interest this Subcommittee. The first study concerns the natural resource pricing policies and practices of foreign governments. The second study involves classification recommendations for motor fuel blending stocks, motor gasoline, and other petroleum products and petrochemicals.

Natural Resources

Many U.S. industry officials, as well as other informed observers, are concerned over certain foreign governments' practices or policies of pricing natural resource products to domestic industrial users at prices substantially below the export selling price or other market value of the product. If natural resources, such as crude petroleum, natural gas, and metal ores are sold or transferred to industrial users within the producing country at preferential prices, these industrial users could potentially have an advantage in energy or raw-material costs. This advantage could enable these users to displace production of downstream products sold by traditional producing countries in chosen markets.

While dual pricing practices have been and are used by a number of nations, domestic interest in this matter has grown sharply in the last two years due to U.S. imports of certain Mexican energy-intensive products such as ammonia, carbon black, and cement. It was alleged that each of these products is in effect subsidized because of the Mexican dual pricing policies for petroleum and natural gas. The subsidy is alleged to be equal to the difference between the foreign home market price and the export selling price or other market value of the products.

The U.S. Department of Commerce has ruled that under current U.S. law, foreign government programs that are generally available to all industries in a foreign country are not countervailable. The pricing of domestic Mexican petroleum and natural gas, although below Mexican export and/or general world levels, is not considered to be a subsidy countervailable under current U.S. law because these resources are available at equivalent prices to all Mexican industries. U.S. industries are concerned with the Commerce ruling and have pursued Congressional legislative remedies. The natural resource subsidy proposal that emerged from these efforts was only narrowly defeated in the 98th Congress.

The issue remains a subject of debate in both the public and private sectors. In November 1984, we were requested by the Subcommittee on Trade of the Committee on Ways and Means to study the consequences of foreign governments' policies of pricing natural resources, including crude petroleum, to domestic industrial users in the country concerned at prices substantially below the export selling price or other market value of the products. The study, entitled Potential Effects of Foreign Governments' Policies of Pricing Natural Resources, was delivered to the Subcommittee on Trade on May 13, 1985.

This study provides detailed coverage of certain foreign governments' pricing policies. Areas of analysis include the effects of such pricing policies on certain industries or groups of industries, the foreign production cost savings conferred by such pricing policies, the competitive advantages of such cost savings vis-a-vis U.S. producers, and the effect of such foreign resource pricing policies on resource allocation within the foreign country. My comments will be limited to our analysis of the major exporters of petroleum products.

The Commission found that formal, written government pricing policies for crude petroleum, were identified in only a few of the over 45 nations studied. However, evidence indicates that dual pricing practices exist in many of the crude petroleum rich nations. The table on page 4 summarizes form the information collected on foreign governments' crude petroleum and natural gas pricing policies and practices.

In most of the crude-petroleum- and natural-gas-rich nations, the pricing practices appear to be centered in the national petroleum company. Most have

Crude petroleum and natural gas: Pricing practices of certain nations including examples of the resulting prices, 1984

Country	National petroleum company	Pricing mechanism	Implemented by	Examples of prices resulting from the pricing mechanisms: Crude petroleum: Domestic	Crude petroleum: Export 1/	Natural gas: Domestic	Natural gas: Export
				Dollars per barrel		Dollars per thousand cubic feet	
Canada	Petro-Canada	Policy and practices o National Energy Program (NEP) o Canada-Alberta Energy Pricing and Taxation Adjustment Agreement (EPTA)	Government and national energy board	2/ 10-38	29 (26.66)	3/ 1.65 5/ 3.15	4/ 1.40-4.40
Mexico	PEMEX	Policy and practices	Government Committee/Pemex	6/ 6-7	29 (26.54)	1.60-1.70	7/ 4.40
Saudi Arabia	Petromin	Practices	Exports-Government Domestic-Petromin	8/ 3-6	29 (27.34)	0.50	None
Kuwait	Kuwait Petroleum Company (KPC)	Practices	Exports-Government Domestic-(KPC)	10-20	29 (26.42)	1.06	None
Indonesia	Pertamina	Practices	Exports-Government Domestic-Pertamina	10-20	29 (29.29)	1.06	LNG to Japan
Nigeria	Nigerian Nation Petroleum Operation (NNPC)	Practices	Exports-Government Domestic-NNPC	10-20	29 (29.51)	1.00	None
Venezuela	Petroleos de Venezuela (PDV)	Practices	Exports-Government Domestic-PDV	9/ 6-8	29 (24.18)	1.00	None
Other OPEC Nations	Yes	Practices	Exports-Government Domestic-Government directly or national petroleum company	10-20	29 (27.65 to 29.02)	1.00	None
Trinidad and Tobago	National Energy Corporation of Trinidad and Tobago	Practices	Government	–	29 (30.37)	0.90-1.75	None
China	Government	Policy	Government	5-7	29 (27.46)	1.05-1.30	None
U.S.S.R.	Government	Administrative decision	Government	4-6	29 (None)	10/ 2.10 12/ 2.71	3.60-6.17 11/

1/ Export price for all of the exporting nations is the OPEC marker price, however, the actual prices of exports differ and are not usually reported in public documents. Prices in parenthesis are average values for 1984 U.S. imports from the respective nations.

2/ Prices for "old" and "new" crude petroleum.

3/ Price in Alberta.

4/ Price range depending on offtake, lower price applies to marginal product.

5/ Price at Toronto City Gate.

6/ Based on foreign domestic petroleum product prices relative to U.S. prices; cost of production estimated at $3. to $6.50 per barrel.

7/ Price at which Mexico exported to the United States. When the price went below this price, Mexico ceased exports in November 1984.

8/ Based on foreign domestic petroleum prices.

9/ Based on foreign domestic petroleum production prices relative to U.S. prices.

10/ Estimated foreign local domestic use as fuel.

11/ Estimated price of sales by pipeline to East European nations.

12/ Calculated netback at large ammonia facility.

broad powers in exploration, production, refining, and marketing. Some have authority extending to petrochemicals, liquefied petroleum gas, and marine transportation.

The practices of Mexico, Saudi Arabia, the U.S.S.R., and China are illustrative.

In Mexico the petroleum refining industry is PEMEX. The transfer price for crude petroleum to the refining industry is below world price levels, but not below the cost of producing crude petroleum, estimated at $3 to $6.50 per barrel. In 1984, the prices of U.S. imports from Mexico of distillate and residual fuel oils, jet fuel, and naphtha did not differ significantly from those for similar U.S. imports from other sources. The Mexican petroleum product exports to the United States would probably have been competitive even if PEMEX had transferred crude petroleum to its refining operations at world price levels.

Saudi Arabia had six refineries as of the beginning of 1984; three new additional export-oriented refineries are expected to be completed shortly. PETROMIN, the Saudi national company, does not make public the price at which crude petroleum is transferred to refining operations. Netback calculations for Saudi exports of petroleum products indicate crude petroleum is transferred to the refineries at a crude petroleum price of $24 to $27 per barrel, compared with the official Saudi crude petroleum export price of $29.25 per barrel. This practice enables the Saudi's to meet or slightly shave any market price necessary to make a sale. The Saudis are promoting these exports because they believe expansion of their refining industry furthers industrial development and provides the basis for further broadening of the industrial base. Under these circumstances, it is probable that

Saudi-petrolem products would be made competitive regardless of crude petroleum prices.

The Soviet refining industry is government-owned and consists of 38 refineries. C~~rude petrol~~eum for refining was available in the U.S.S.R. for as low as $23.50 per barrel in the third quarter of 1984, based on netback calculations while the U.S. refineries' acquisition cost was $28.69 per barrel. A $5-per-barrel crude petroleum price advantage, if passed through entirely to the price of petroleum products, is significant and allows the Soviet pricing flexibility. In the world export market, the U.S.S.R. prices petroleum product exports at prices as close to world levels as it can and still assure the sale. Therefore, during periods of high prices, the Soviets might be competitive even if world prices were charged for the Soviet crude petroleum used in their refineries. However, during surplus periods, such as at present, it is probable that Soviet-produced refined products would not be competitive without a crude petroleum price advantage.

China's refining industry is comprised of 33 medium-to-large state-owned refineries. Generally, it is difficult to assess China's production cost savings resulting from its pricing practices for energy materials. Since prices of goods besides crude petroleum are also administered, the cost discrepancies of these goods may either add to or reduce the cost savings provided by the relatively low cost of crude petroleum. However, the refining industry in China reportedly obtains most of its crude petroleum at $5 to $7 per barrel, or approximately $22 to $24 per barrel less than the composite acquisition cost of crude petroleum paid by refineries in the United States in 1983 and 1984. Therefore, even though China sells its refined products such as gasoline, diesel fuel, and kerosene at or near world prices in the world market, it could reduce prices significantly to gain market penetration or share.

In summary, some foreign government policies or practices, including the policy of pricing natural resources to domestic industries below export levels, have the promotion of exports or import substitution as stated or unstated objectives. The investigation substantiated production cost advantages realized by certain foreign energy-intensive industries with respect to U.S. producers of like products. The difference between the production costs of foreign and U.S. producers may confer a competitive advantage to the foreign producer in at least three areas: (1) it may be retained as additional profit which could enable the foreign producer to invest more heavily in research and development or new, more efficient facilities, for example; (2) it may provide additional pricing leverage to enable the foreign producer to discount its products in order to gain market share or to penetrate new markets; and (3) it could enable the foreign producer to defray transportation and other costs to markets that could not have been reached on a competitive basis if the producer had paid export or world level prices for the energy resources used. The table on page 8 gives examples of U.S. and foreign production costs for certain commodities, including base petrochemicals and petroleum products.

Lower foreign production costs do not necessarily mean lower U.S. consumer prices for imports. In addition, even if the U.S. import price does reflect at least part of the lower foreign production cost, further U.S. distribution and marketing profits and costs could absorb most, if not all, of the margin.

Sample energy-intensive products: Foreign and U.S. production costs, 1983-84

Country	Commodity	Estimated average production cost			
		Foreign		United States	
		Total	Fuel/ feedstock	Total	Fuel/ feedstock
Canada	Ammonia	$79-$110/ST	$59-$70/ST	$92-$170/ST	$71-$114/ST
	Ethylene	0.17-.23/lb.	0.05-.07/lb.	0.20-.27/lb.	0.09-.14/lb.
	Methanol	1/ .29-.58/gal.	.15-.23/gal.	.44-.56/gal.	.28-.37/gal.
	Steel	2/ 436/ST	62-90/ST	484/ST	68-97/ST
Mexico	Ammonia	3/ 45-85/ST	20-67/ST	92-170/ST	71-114/ST
	Carbon black	4/ .08-.09/lb.	.03-.05/lb.	.21-.23/lb.	.16-.18/lb.
	Cement	25-35/ST	4.75-8/ST	40-50/ST	13-18/ST
	Float glass	.16-52/sq. ft.	.06-.21/sq. ft.	.20-.64/sq. ft.	.10-.32/sq. ft.
	Lime	15/ST	6.32/ST	32-40/ST	19-21/ST
	Petroleum products	5/ 6-7/bbl.	3-6.50/bbl.	30-32/bbl.	28-29/bbl.
	Steel	6/ 179/ST	28-57/ST	285/ST	68-97/ST
Saudi Arabia	Ammonia	45-65/ST	12-19/ST	92-170/ST	71-114/ST
	Ethylene	.07-.19/lb.	.01-.03/lb.	.20-.27/lb.	.09-.14/lb/
	Methanol	.24-.37/gal.	.04-.06/gal.	.41-.58/gal.	.28-.37/gal.
	Petroleum products	4.40-7.65/bbl.	3-6/bbl.	30-32/bbl.	28-29/bbl.
Trinidad and Tobago	Ammonia	84-105/ST	32-44/ST	92-170/ST	71-114/ST
	Methanol	7/ .22-.24/gal.	.08-.14/gal.	.41-.56/gal	.28-.37/gal.
U.S.S.R	Petroleum products	8/ 12-13/bbl.	4-6/bbl.	30-32/bbl.	28-29/bbl.
	Ammonia	9/ 70-149/ST	18-95/ST	92-170/ST	71-114/ST
China	Petroleum products	10/ 10-11/bbl.	5-7/bbl.	30-32/bbl.	28-29/bbl.

1/ For Western Canadian plants.

2/ Estimate for integrated mills based on relative natural gas prices and petroleum product prices in Canada and the United States.

3/ Estimate based on foreign domestic price.

4/ Estimate based on relative CBFS prices in Mexico and the United States.

5/ Estimate based on relative petroleum product prices in Mexico and the United States.

6/ Estimate for non-integrated mills based on relative natural gas prices in Mexico and the United States.

7/ Estimate based on relative natural gas prices in Trinidad and Tobago and the United States.

8/ Estimate based on relative natural petroleum product prices in the U.S.S.R. and the United States.

9/ Estimate based on natural gas values of zero and $2.71 thousand cubic feet which is the netback realization from ammonia sales to the United States.

10/ Estimate based on relative crude petroleum prices in China and the United States.

Motor fuel blending stocks

From late 1983 through July 1984 a number of bills were introduced in Congress pertaining to the classification of naphtha and motor fuel blending stocks and unfinished gasoline. A conference committee on the recently enacted Trade and Tariff Act of 1984 failed to reach a compromise between the different proposals. In November 1984, we were requested by the Committee on Finance and the Committee on Ways and Means, to study the tariff classification and treatment of those products potentially affected by a reclassification of catalytic naphtha and other motor fuel blending stocks. The study was completed on April 15, 1985.

The Commission received many comments about imports of gasoline and other petroleum products. Some of these comments, in addition to addressing the appropriate classification of catalytic naphtha and other motor fuel blending stocks, alleged that the levels of petroleum product imports were causing concern in certain sectors of the petroleum refining industry.

The United States is a net importer of petroleum products, primarily from Venezuela and refineries in the Caribbean nations. The value of petroleum product imports increased from $11.4 billion in 1980 to $18.6 billion in 1984. U.S. imports of petroleum products could increase further as additional refining capacity comes onstream in the OPEC nations and other conventional-energy-rich nations. At the start of 1985, the OPEC nations had the capacity to refine 4.8 million barrels per day of crude petroleum and are expected to have a refining capacity of 7.7 million barrels per day by 1987. At a time when exports of crude petroleum have peaked, these nations have developed or are developing downstream industries, including petroleum refining, to utilize natural resource advantages and to diversify their exports.

Over the period from 1980 to 1984, the quantity of U.S. imports of residual fuel oils decreased from 282 million barrels to 254 million barrels. For the same period, imports of light petroleum products increased, led by an increase in motor fuel imports, from 19 million barrels in 1980 to 102 million barrels in 1984.

Our study indicated that the duty rate assessed on motor fuel blending stocks can vary widely depending upon the composition of the products. Because of these different compositions, it is particularly difficult to establish physical or chemical specifications for motor fuel blending stocks. The Commission, therefore, recommended that these materials be classified by end-use. The main advantage of a tariff item combining all motor fuel blending stocks is that it would require only a certification by the importer of end use of the imported material; no technical definition to distinguish motor fuel blending stocks from other mixtures is necessary. Such a provision should also capture all future imports of materials to be used as blending components for motor fuel.

Senator NICKLES. Thank you very much, Ms. Stern.

Just a brief question on that line. What statutory relief is available?

Dr. STERN. Well, basically we are administering two statutes, one which deals with imports that no one is alleging are coming in unfairly. That's called our escape clause action, section 201. And in that, three basic points have to be proven before relief can be recommended by the Commission to the President.

One, there has to be increasing imports. There has to be shown serious injury to the domestic industry, and generally we look at a number of different criteria, for example, capacity, employment, and profits. We also look at other indicators as well, I'd be happy to spell out if people are further interested.

And then the third point that has to be shown is that those increasing imports are as important a cause as any other cause of the serious injury that the industry is experiencing. And that's where the Commission gets into weighing various causes that a given industry may be buffeted by in addition to imports.

And if we find that imports are at least as important as any other cause, then we are duty bound to vote affirmatively either on the serious injury or the threat of serious injury that the industry may be experiencing, and then recommend to the President various forms of relief—either in terms of import restrictions, tariffs or quotas, or adjustment assistance.

The other basic statutory scheme we administer deals with unfair imports, imports which are allegedly being dumped, sold at less than fair value in this country compared to the value in the foreign country, or subsidized, which is the point I was touching on here. We at the Commission administer the material injury portion of that statute, determining whether the domestic industry has been materially injured by those unfair imports.

The Department of Commerce, in a completely separate determination, decides whether the alleged act is indeed unfair. And that's where we get into this issue of how the Department of Commerce has been administering the question of whether the dual pricing policies or practices constitute a subsidy.

And, as you know, there is legislation pending, at least on the House side, legislation that was introduced and failed to pass last year and is pending this year, which deals with that particular issue.

There are other statutory provisions as well. You mentioned national security considerations. The International Trade Commission does not get into administration of that particular law. And then the Special Trade Representative of the President involves himself in other complaints about unfair practices under section 301, which again is not administered by the International Trade Commission.

Senator NICKLES. Do you have any cases pending now that deal with ammonia or petroleum products as far as unfair trade practices?

Dr. STERN. We certainly have had ammonia cases in the past which came under section 406, which I didn't mention, dealing with nonmarket economies, imports from the Soviet Union in particular. We have had methanol cases in the past.

Do we have any cases that are on our docket?

I don't think so. There are no cases presently pending that would relate to your question.

Senator NICKLES. Secretary Boggs, you mentioned that domestic refining capacity has been reduced by, I believe you said, 3 million barrels per day. You also said internationally it's been reduced by 4 million barrels per day?

Mr. BOGGS. Four million was in Western Europe. The total for the free world is about 9 million.

Senator NICKLES. With the present status, is there still a surplus capacity?

Mr. BOGGS. Well, as I indicated, capacity is currently estimated in the free world at 57 million barrels a day, with demand at 46 million, so that's certainly a significant difference.

Senator NICKLES. Fifty-seven?

Mr. BOGGS. Fifty-seven.

Senator NICKLES. So we'd have something like, what, 16 percent excess capacity or something along that line?

Mr. BOGGS. More like 20-plus percent. Of course, you can never use 100 percent of capacity, but, on the other hand, you've got refinery gain. There's a pretty substantial overhang.

Senator NICKLES. Is it not true that there are several additional large international refineries that will be coming on stream in the near future, so total capacity will be increasing?

Mr. BOGGS. Well, of course there are likely to be additional closings in various parts of the world. As we indicated, the export-oriented refineries that we see as being fairly well in train are on the order of about 1 million barrels or a little over 1 million barrels a day.

There are also some third world countries that will be increasing their capacity primarily for domestic use, particularly countries that are now starting to find oil where previously they had found none. So you have to balance those trends out against each other.

I would say there is certainly going to be some additional movement both up and down, but I would conjecture that the largest part of the refinery closing in the world has been accomplished.

Senator NICKLES. Going on your last statement, you say the largest portion of the refining closures, so we'd had somewhat of a shakeout. I think in your statement you mentioned 111 refineries have closed, domestic refineries have closed, in the last 4 or 5 years?

Mr. BOGGS. That's correct.

Senator NICKLES. But even with additional capacity that's being built overseas, primarily in the Persian Gulf area—I am talking about primarily the refineries that are built for export purposes—what do you envision as the future of our domestic refineries? Do you think they'll be able to continue to compete?

Mr. BOGGS. Well, by our current estimates, I think we will certainly continue to have a substantial and vigorous refining industry. U.S. refiners are clearly in a situation of strong competition, as indeed are all the refineries in the world. Because of the level of competition that will be faced some of the OPEC countries themselves have been canceling projects that would have added new refining capacity.

Thus, I think that in this situation, pressure is likely to continue, although, as with all of our estimates, that's somewhat dependent on what happens to the price of oil, and you can get lots of experts to project that in both directions.

Senator NICKLES. A lot of the refineries that closed—correct me if I'm wrong—I would think that the majority of the refineries that did close were the smaller refineries. Were those refineries obsolete, or inefficient, or not competitive?

Mr. BOGGS. We don't have a specific way of measuring those kinds of adjectives. Table 3 in my testimony does show you size, which is something that we can classify objectively. From 1980 to 1985 nearly half of the refineries with less than 30,000 barrels a day closed, whereas only a handful of the refineries with over 100,000 barrels a day closed.

So obviously size had something to do with it. To a great extent, those larger refineries would have been the more sophisticated. Pure age doesn't always have a lot to do with it, because some of the old ones have been continuously upgraded, while some of the new ones were built in response to the entitlements program.

I think you can say that, obviously, in any competitive situation, those refiners that are less competitive tend to be the ones that get closed down first.

Senator NICKLES. You mentioned also that you didn't feel like import restrictions were the correct avenue to follow. I don't know whether or not you addressed the issue of a tariff. You mentioned a study. Has the Department taken a position on whether there should be any import fee on crude and/or products?

Mr. BOGGS. I think the administration has pretty consistently taken the position that we do not favor import fees or tariffs for the purpose of either raising revenue or raising the price to American consumers in order to accomplish other objectives, and I think that our estimate of the situation would continue to hold.

Essentially, the American consumers bore the burden of increased prices as prices were on the way up, and we believe that they are entitled to get the benefits as prices have come down under the forces of competition.

Senator NICKLES. So basically the response is opposition to either a quota or to some type of a tariff or import fee, $5 per barrel or something that's been kicked around?

Mr. BOGGS. Under current circumstances, yes.

Senator NICKLES. Just one final question before I ask my colleagues if they have any similar questions.

You mentioned a study on whether or not we should have some type of tariff. When is that coming out?

Mr. BOGGS. It's being done within our economic analysis section, and is designed more to focus on the economic effects rather, at least as I've seen the draft, than to be a purely policy document. I think it's going to try to lay out an analysis of what would be the costs and what would be the benefits. I believe that we would hope to have that finished within the next month or so.

Senator NICKLES. Might I ask you to expand that? I'll first ask you a question. Do you think it's equitable that we have a domestic excise tax on domestic production, called the windfall profit tax, and we don't have it on imports?

Mr. BOGGS. The windfall, or crude oil excise tax has, of course, had a history of intense discussion and certainly is not equitable from an international trade point of view. It was imposed for other reasons. It has been maintained for other reasons.

Senator NICKLES. Let me ask you if you would expand your study somewhat. I, for one, think that there is a very significant inequality in the fact that we have the tax on domestic production and we don't have it on imports. So we're basically encouraging imports and discouraging domestic production. Now this administration inherited that philosophy, but I still think that philosophy is wrong.

Would you incorporate in your study an equalization? In other words, figure out what kind of an import fee it would take so there wouldn't be an encouragement to import versus domestic production. Domestic production windfall profits is an excise tax which costs so much per barrel. You follow the question I'm asking?

Mr. BOGGS. I think I follow it. It seems to me there are two parts. One is that a tax of $2 or $4 or $5 would have the same effect, whatever the rationale would be. We certainly can do that.

The other part of it would be that we should try to determine the exact amount of the inequality. We're having a lot of discussions about the entire American tax system at this point, and I think it would be quite a difficult job to try to calculate out what is the "degree of inequality" in the tax system on petroleum products.

But I think we can certainly look at whether we have numbers that would relate to the rationale that you've given.

Senator NICKLES. Well, again I'll just repeat so you have it crystal clear. We have a tax on domestic production. We produce so many barrels of oil in this country and we tax it on production. We have no tax or tariff on imports; is that correct, on imported petroleum?

Mr. BOGGS. Yes, a tiny amount, but it hardly counts.

Senator NICKLES. How do U.S. oil import tariffs compare to those of foreign countries?

Mr. BOGGS. I don't have that information. I know some have significant tariff or bans; others do not. I think it's all over the lot. We could provide some information on that.

Senator NICKLES. Could you provide that for the committee as well? I appreciate that.

[The information follows:]

U.S. tariffs for refined petroleum products
are as follows:

Naptha: 0.25 cents/gallon (10.5 cents/barrel)

Gasoline: 1.25 cents/gallon (52.5 cents/barrel

Distillate fuel oil: 0.25 cents/gallon (10.5 cents/barrel

Residual fuel oil: 0.25 cents/gallon (10.5 cents/barrel

A U.S. Customs proposed regulation is under consideration to classify gasoline blending stock as a chemical mixture. Such a proposal, if adopted would increase the tariff to about 6-8 cents/gallon, depending on the invoice price of the gasoline blending stock.

The European community applies no quantitative restrictions (quota) to product imports. Feedstocks for refining (crude oil) or petro-chemical processing are exempt from tariffs. Duties (3.5% distillate fuel oil and heavy fuel oils, 6% for lighter products) have to be paid only for products from industrialized countries and centrally planned economies destined for consumption in the EC. Products from the Soviet Union and the USA fall into this category.

Under the General System of Preferences products from a number of countries (including Saudi Arabia, Kuwait, Libya) can be imported free of duty. There is a volume ceiling, however, which is fixed annually for each of the three main product categories and is applied to each exporting country individually. When the ceiling is reached or exceeded, the Commission can reimpose the duty, either on its own initiative or at the request of an EC Member State. Although the ceilings have often been exceeded in recent years, this facility has not been used.

In addition, France maintains restrictions (import licenses) which limit the access of non-EC products to 20% of total French product imports. In Greece the state has a monopoly on product imports. These imports are subject to a licensing scheme executed by the Ministry of Trade. In Ireland, oil companies are obliged to purchase 35% of their product throuput from the domestic refinery. The other members of the European communities (Belgium, Denmark, Italy, Luxembourg, Netherlands, West Germany, and United Kingdom) do not have any additional restrictions.

Other countries with their tariff levels and other restrictions on oil products are:

Austria

Tariffs are:

Gasolines	31.50	schillings/100 kg	($1.58/bbl)
Kerosenes	14	" "	($0.67/bbl;
Gas Oils	18	" "	($1.02/bbl)
Fuel Oils	5	" "	($0.32/bbl)

Oil products are eligible for preferential tariff treatment (GSP) when imported from any developing country.

There are no quantitative restrictions on imports.

Australia

Importers of oil products have to pay the same amounts as those charged to domestic refiners when they deliver products to the domestic market.

There are no quantitative restrictions on imports.

Canada

Imports of oil products are duty-free except from lubricating oil, some categories of which are subject to rates up to 20 per cent (general tariff). Oil products are eligible for preferential treatment. Libya and Saudi Arabia are not Canadian GSP beneficiaries.

Finland

Only gasolines are subject to a duty of 0.11 Finnish marks per litre ($2.50/bbl) and are not eligible for preferential treatment (GSP). For most products quota are applied as well as discretionary licensing.

Portugal

Tariffs are:

Light oil	7-35% of import value
Medium oil	5- 6% of " "
Kerosene	25% of " "

A license is required for all product imports. Only the oil companies with a license to operate in the domestic market can import products, but under a general quota law and only if state-owned refineries cannot supply them with sufficient products.

Spain

Imports of oil products are subject to state trading. These products are to be imported in accordance with the contract signed between the state and the concessionary company (no customs duties). Only domestic refiners have the right to import products.

Switzerland

Importers of oil products have to pay the same amounts as those charged to domestic refiners when they deliver products to the domestic market. Products are not eligible for preferential tariff treatment.

Turkey

All imports of oil products are government-controlled and are part of an annual import programme.

Japan

Gasoline imports are not allowed, according to an administrative decision. For other products the tariffs, which are progressive for fuel oil are as follows:

1.	Fuel Oil	
	Type A 1)	955 yen/kl (approximately US $0.61/bbl) for the first two million m^3 (approximately 13 million bbl) imported into Japan (not by individual company but for the country as a whole. For imports over two million m^3 the tariff is 2,280 yen/bl ($1.39/bbl).
	Type B	730 yen/kl ($0.44/bbl) for the first 5.5 million m^3 (approximately 35 million bbl).
	Type C	660 yen/kl ($0.40/bbl) for first 5.5 million m^3 (approximately 35 million bbl).
2.	Jet Fuel	3,033 yen/kl ($1.90/bbl).
3.	Naphtha (for burning)	125 yen/kl ($0.08/bbl).
4.	Kerosene	1,010 yen/kl ($0.63/bbl).
5.	Gas Oil	1,890 yen/kl ($1.20/bbl).
6.	LPG	550 yen/kl ($0.35/bbl).

Most oil products are eligible for varying forms of preferential treatment when imported from any developing country.

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1) Type A is for boilers, small and mid-size diesel engines. Type B is for big diesel engines. Type C is for power

Senator NICKLES. Senator Johnston.

Senator JOHNSTON. Thank you, Mr. Chairman. Welcome back to the committee, Mr. Boggs.

In the bad old days when we were short of crude oil, we were very concerned about the Saudi Arabians and the Middle Eastern producers acquiring refining capacity, because we thought in a period of shortness that they would thereupon be able to insist that we take their refined product. That's No. 1.

And, second, we were concerned that it would be much easier for them to place an effective embargo in a time of shortness if they controlled the refining capacity as well as the crude oil supply.

So you share those views with respect to a time of shortness? Should I say, were those views correct then and would they be correct now in a time of shortness? Shall I repeat that? Do you understand it?

Mr. BOGGS. It sounds like that encompasses a whole world of view that I'll try to sort out. Obviously the greater the control over supply that a potential country that desires to impose an embargo has, the more effective it might be.

Senator JOHNSTON. Let me restate that and make it a little more clear.

Mr. BOGGS. On the other hand, the amount of targeting that you can do with an embargo is quite a controversial and complex issue because it's not at all clear that the embargo, say, in 1973, really was effective on a targeted basis rather than simply reducing the total world oil supply.

Senator JOHNSTON. Well, that's right. What we found was that they could not target the United States because it would flow through to Europe or wherever and the crude oil would flow. There was a concern that refined products would not flow because they were made for a market and would be more market specific.

Was that true, in your view, and would it be true now?

Mr. BOGGS. As I say, we have never had that situation in the sense of having refining capacity quite concentrated. Refining capacity is much less concentrated than crude oil production, and I think if you had a comparable degree of refining concentration it would certainly be an equivalent concern and could potentially be a little bit greater concern because of some of the things you mentioned.

Senator JOHNSTON. I think the point is—and I think it ought to be given some real thought—that any time of crude oil shortage, if you control also refining capacity—let's say this country is short on refining capacity 2 million barrels a day, just pick a number—and there is also a marginal shortness of crude oil in the world, then whoever the OPEC group is could target the United States rather effectively through refining capacity. I think it makes the system much more subject to control.

And, second, in a time of shortness they can insist that you take their refined capacity in preference to their own. And so it seems to me that even though we don't need this refining capacity right now because I think in times of world oil surplus, I guess you'd call it a deliverability surplus almost as they do with natural gas, but in a time of surplus it seems to me that refining capacity, it's location, is of much less importance than in a time of market equilibrium or certainly in a time of shortage.

So the fact that we are approaching that time of shortage of refining capacity seems to me something we ought to be concerned about now, because we're not always going to be in a time of surplus of crude oil.

In that respect, isn't it true that about 1 million barrels a day of sophisticated refining capacity was closed just in the last year?

Mr. Boggs. In the United States or worldwide?

Senator Johnston. That's in the United States.

Mr. Boggs. Without making a judgment on what counts as sophisticated, I would say that that sounds somewhat higher than our numbers. I could try to provide you with a specific computation, but I think that that would be a little higher than what we would say.

Senator Johnston. That's in the ball park of size, isn't it? I mean, it's about that much, if it's not quite that much?

Mr. Boggs. I think it's a little bit lower, but certainly there were closures during the past year.

Senator Johnston. I would appreciate it, while you are at it, to give us a statement of those refineries with high gasoline yields that have closed, the given reasons for the closing, and any case-by-case analysis you have on that.

Mr. Boggs. Yes, I can certainly try to do that because we do have specific names and numbers in the EIA files. The number I have for total capacity reduction from 1983 to 1984 was about 700,000 barrels, and from 1984 to 1985 was about 500,000 or 600,000 barrels a day. And we could take a look at them and without being prejudicial try to indicate whether you would call them sophisticated or not.

[The information follows:]

Statistics published by EIA indicate that 18 refineries shut down in 1983, and 26 refineries shut down in 1984. Two of these refineries have subsequently been reactivated: Amerada Hess in Port Reading, New Jersey, and Hill Petroleum in Krotz Springs, Louisiana. The remaining 42 refineries that shut down in 1983 and 1984 included several that did not produce motor gasoline. The shutdown refineries that produced significant amounts of motor gasoline in 1982 were:

Champlin Petroleum Co.	Enid, Oklahoma
Marion Corp.	Theodore, Alabama
Mobil Oil Corp.	Augusta, Kansas
GHR Energy Corp.	Good Hope, Louisiana
Tosco Corp.	Duncan, Oklahoma
Dorchester Refining Co.	Mt. Pleasant, Texas
Oklahoma Refining Co.	Cyril, Oklahoma
Tesoro Petroleum Co.	Carrizo Springs, Texas
Powerine Oil Co.	Santa Fe Springs, Cal.
Tosco Corp.	Bakersfield, California
USA Petrochemical Corp.	Ventura, California

These 11 refineries had net production of motor gasoline of 225 thousand barrels per day in 1982, approximately four percent of total production in the United States.

Table 18. Refineries Shutdown During 1983

District/Refinery	Location	Crude Distillation Capacity (B/CD)	Total Downstream Capacity (B/SD)	Date of Last Operation	Date Shutdown	Years in Operation
PAD District I						
Amerada Hess Corp.	Port Reading, New Jersey	68,000	79,000	12/74	12/83	25
Quaker State Oil Refining Corp.	Emlenton, Pennsylvania	0	2,980	12/83	12/83	25+
Total		**68,000**	**81,980**	--	--	--
PAD District II						
Champlin Petroleum Co.	Enid, Oklahoma	53,800	58,500	6/83	12/83	25+
Hudson Refining Co. Inc.	Cushing, Oklahoma	19,000	12,150	12/82	11/83	6
Mobil Oil Corp.	Augusta, Kansas	50,000	83,900	9/83	9/83	25+
Total		**122,800**	**154,550**	--	--	--
PAD District III						
Erickson Refining Corp.	Pt. Neches, Texas	30,000	0	12/81	8/83	4
GHR Energy Corp.	Good Hope, Louisiana	300,000	433,000	12/82	9/83	15
Independent Refining Corp.	Winnie, Texas	50,000	63,000	10/81	8/83	23
Mallard Resources Inc.	Gueydan, Louisiana	7,400	0	11/83	12/83	4
Marion Corp.	Theodore, Alabama	25,000	14,500	3/83	9/83	15
McTan Refining Corp.	St. James, Louisiana	19,300	0	7/81	8/83	6
Petraco-Valley Oil Refining Co.	Brownsville, Texas	12,300	0	3/83	12/83	5
Pioneer Refining Ltd.	Nixon, Texas	15,000	15,900	4/83	12/83	9
Shore, Inc.	Kilgore, Texas	550	0	3/83	7/83	3
Thriftway Oil Co.	Graham, Texas	1,184	0	4/81	11/83	25+
Total		**460,734**	**526,400**	--	--	--
PAD District IV						
Silver Eagle Oil Inc.	La Barge, Wyoming	1,500	0	10/82	8/83	9
PAD District V						
Arizona Fuels Corp.	Fredonia, Arizona	6,000	0	2/83	9/83	11
Demenno-Kerdoon	Compton, California	10,000	2,000	1/83	8/83	6
Total		**16,000**	**2,000**	--	--	--
United States Total		**669,034**	**764,930**	--	--	--

B/CD = Barrels per Calendar Day.
B/SD = Barrels per Stream Day.
Source: Form EIA-820.

Table 28. Refineries Shutdown During 1984

District/Refinery	Location	Crude Distillation Capacity (B/CD)	Total Downstream Capacity (B/SD)	Date of Last Operation	Date Shutdown	Years in Operation
PAD District I						
Ashland Oil Inc.	Buffalo, New York	**84,000**	**108,500**	7/82	12/84	36+
PAD District II						
Ashland Oil Inc.	Findlay, Ohio	20,400	8,000	2/82	12/84	36+
Ashland Oil Inc.	Louisville, Kentucky	25,200	29,000	4/82	12/84	36+
Oklahoma Refining Co.	Cyril, Oklahoma	12,750	23,100	12/84	12/84	36+
Oklahoma Refining Co.	Thomas, Oklahoma	11,600	0	12/84	12/84	4
Tonkawa Refining Co.	Arnett, Oklahoma	12,000	6,000	6/84	9/84	16
Tosco Corp.	Duncan, Oklahoma	47,000	85,000	6/83	12/84	35
Total		**128,950**	**151,100**	--	--	--
PAD District III						
Caribou Four Corners Inc.	Farmington, New Mexico	2,200	2,400	5/82	8/84	19
Celeron Oil & Gas Co.	Mermentau, Louisiana	11,000	0	2/83	8/84	6
Dorchester Refining Co.	Mt. Pleasant, Texas	26,500	38,800	9/84	12/84	36+
Eddy Refining Co.	Houston, Texas	3,250	0	10/84	11/84	36+
Hill Petroleum Co.	Krotz Springs, Louisiana	57,400	62,000	9/84	11/84	6
Mid-Gulf Energy Corp.	Ingleside, Texas	39,400	20,000	10/83	5/84	6
Port Petroleum Inc.	Stonewall, Louisiana	3,200	0	12/83	2/84	4
Quintana Petrochemical Co.	Corpus Christi, Texas	33,300	54,000	7/84	9/84	30
South Hampton Refining Co.	Silsbee, Texas	18,100	28,000	12/82	12/84	24
Southern Union Refining Co.	Lovington, New Mexico	36,100	18,500	8/84	11/84	8
Tesoro Petroleum Corp.	Carrizo Springs, Texas	26,100	3,500	7/84	12/84	27
Warrior Asphalt Co.	Holt, Alabama	5,500	2,000	8/83	12/84	30
Total		**282,050**	**229,200**	--	--	--
PAD District IV						
Caribou Four Corners Inc.	Woods Cross, Utah	**8,400**	**8,200**	12/82	12/84	21
PAD District V						
Anchor Refining Co. Inc.	McKittrick, California	9,000	7,000	11/82	2/84	6
ECO Petroleum Inc.	Long Beach, California	0	7,000	7/81	3/84	8
Marlex Oil & Refining Co.	Los Angeles, California	21,100	0	1/84	3/84	7
Powerine Oil Co.	Santa Fe Springs, California	44,120	100,100	6/84	8/84	34
Tosco Corp.	Bakersfield, California	38,800	80,000	11/83	11/84	33
U.S.A. Petrochemical Corp.	Ventura, California	24,000	7,000	12/84	12/84	7
Total		**137,020**	**201,100**	--	--	--
United States Total		**640,420**	**698,100**	--	--	--

B/CD = Barrels per Calendar Day.
B/SD = Barrels per Stream Day.
Source: Form EIA-820.

Senator JOHNSTON. OK. Now our demand for refined products is rising, is it not?

Mr. BOGGS. It depends on how you measure it. Petroleum demand so far this year is down from last year. In 1984 demand was up from 1983. You can get various estimates about what'll happen in the future, but it's certainly not rising so far this year.

Senator JOHNSTON. What is your estimate for the total year demand, 1985 over 1984?

Mr. BOGGS. The EIA estimate, I think, is down just a fraction. I noticed the IPAA estimate which came out in San Francisco last week was up, but just a fraction of a percent. So I would say that I think from what I read the consensus would be that oil demand this year would be pretty flat compared to last year, give or take a fraction.

Senator JOHNSTON. And refining capacity, whether it's going down a million 1 day or 600,000 a year, is certainly going down. At what point would we get concerned about the size of our domestic refining capacity?

Mr. BOGGS. I don't think we have a specific number. We can look historically and say that today our refining capacity is just about equal to consumption, 99, 100 percent of consumption. During the mid-1960's it fell below 90 percent in 1966 for the first time, and then went below 80 percent just before 1973.

Certainly the lower you get, the greater the degree of concern. I don't know that I could put a specific number on it, but I think it's important to look historically and see that the situation of having domestic capacity that was greater than all of our consumption, in effect having a situation that would handle the case of no product imports at all, has been very rare in our history, going back for the last 35 years.

[The information follows:]

Year	Refinery Capacity[1]	Total Petroleum Products Supplied	Capacity: Total Product Supplied
1949	6.23	5.76	1.08
1950	6.22	6.46	0.96
1951	6.70	7.02	0.95
1952	7.16	7.27	0.98
1953	7.62	7.60	1.00
1954	7.98	7.76	1.03
1955	8.39	8.46	0.99
1956	8.58	8.78	0.98
1957	9.07	8.81	1.00
1958	9.36	9.12	1.03
1959	9.76	9.53	1.02
1960	9.84	9.80	1.00
1961	10.00	9.98	1.00
1962	10.01	10.40	0.96
1963	10.01	10.74	0.93
1964	10.31	11.02	0.94
1965	10.42	11.51	0.91
1966	10.39	12.08	0.86
1967	10.66	12.56	0.85
1968	11.36	13.39	0.85
1969	11.70	14.14	0.83
1970	12.02	14.70	0.82
1971	12.86	15.21	0.85
1972	13.29	16.37	0.81
1973	13.64	17.31	0.79
1974	14.36	16.65	0.86
1975	14.96	16.32	0.92
1976	15.24	17.46	0.87
1977	16.40	18.43	0.89
1978	17.05	18.85	0.90
1979	17.44	18.51	0.94
1980	17.99	17.06	1.05
1981	18.62	16.06	1.16
1982	17.89	15.30	1.17
1983	16.86	15.23	1.11
1984	16.14	15.71	1.03
1985*	15.55	15.78	0.99

(1949-1984 computed from Energy Information Administration, Annual Energy Review 1984, pp. 105, 109; first quarter 1985 computed from EIA, Petroleum Supply Monthly, table 13, and Short-Term Energy Outlook, table 7).

* First Quarter

[1] Capacity in million barrels per calendar year on January 1.

Senator JOHNSTON. Well, if we're at 98 percent of demand now and going down, at some point clearly we'd get concerned, and when we get concerned then what would you recommend that we do?

Mr. BOGGS. As I indicated, it's not perfectly clear that capacity is going to continue to decline at those rates or at any rate. The EIA indicated in their latest Petroleum Supply Monthly that they asked companies to indicate what they would have on line in January 1986 for whatever that's worth, and those indications were down only about 100,000 barrels a day from where they were in January 1985.

Obviously, measures that could be taken would include tariffs and quotas, could include some type of standby mothballing, or other means of subsidy. You have to look at the fact, of course, that any of those measures impose direct costs either on taxpayers or on consumers, and you would have to measure off those effects against whatever the situation of the moment was, including, as you raised very well in your statement, the degree of concentration.

That is, if the refining capacity in the rest of the world were concentrated in one or a few areas, that would be a more serious situation than the situation we have now, which is that we get our imported products from a very wide range of sources and the refining capacity is much more widely distributed than is crude oil production capacity.

Senator JOHNSTON. Well, I would suggest that we ought to begin to think about what we do when we get short of refining capacity, because I—you know, while it might not happen, I think we ought to begin to ask that question.

Mr. BOGGS. I think that's one of the reasons this study will try to lay out the costs and the benefits and how they might change over time, so that we can at least start to get a look at how the costs might change and how the benefits might change.

Senator JOHNSTON. One final question, and this is a good one. I read last night about estimates of what's going to happen to the price of crude oil. The one I read last night was from Cambridge Energy Associates, Daniel Yergin and that group, and they predict two or three scenaries. It's always safest to predict two or three scenarios; that way you're right whatever happens.

But they say the first scenario is that OPEC will hold, and that's been $26 and $22 a barrel. The other is that OPEC doesn't hold, and it looks to me with Iraq producing that pipeline with the additional half million barrels a day, with a possibility of 2 million barrels a day, that OPEC might not be holding. Then the next support area is in the area of, I think it is, $18 a barrel, and that's sort of the BTU equivalency, I think they say.

And if that doesn't hold, then you go down to $5 to $6 a barrel. That's when you shut down Louisiana. [Laughter.]

Or have a revolution or something. What is your view?

Mr. BOGGS. I've always indicated my opinions are worth what you pay for them, and unlike Yergin they don't pay for mine. I've been reading Dan's stuff for quite a while. You know, for a number of years he was predicting the third oil price shock, and then when the prices started falling he says, "See, I told you," and said the "shock" was the price going downwards. So you can always catch up with the facts.

I have simply said that personally it appears to me that the direction of real price pressure is going to continue to be downward for some period of time. You have a surplus in oil——

Senator JOHNSTON. At least for a couple of weeks.

Mr. BOGGS. I would put less money on the next couple of weeks than the next couple of years because short-term effects change rapidly. But the world is continuing to learn to get along with less oil. That, plus the increases in production from a very wide range of countries, have been the two most surprising things that have happened over the last several years, that we have continued to increase our economic output in this country while using about the same amount of oil.

And, as I indicated, this year most of the predictors would say it's going to stay about steady and we're going to have some reasonable level of economic growth. In the longer term——

Senator JOHNSTON. For what period of time do you predict downward pressure? What kinds of periods? I mean, 2 to 4 years, 6 to 10?

Mr. BOGGS. I try not to predict more than a couple of years, at least on my own hook. I think that looks clear for a couple of years. During that couple of years, we'll see what's happening to demand, because one of the big issues is whether demand is going to pick up and whether exploration and discovery are going to continue around the world.

Again, it's been surprising how much exploration and discovery have continued despite price decreases. Of course, the costs of drilling have decreased in many places around the world as governments have responded with lower taxes and as the private sector has responded. I don't think I have a better crystal ball than the next guy about the next 10 or 15 years; I'm not sure it's any worse, but I don't think I can see too clearly more than a year or two.

Senator JOHNSTON. Thank you.

Senator NICKLES. Senator FORD.

Senator FORD. Thank you, Mr. Chairman.

Mr. Boggs, I want to followup Senator Johnston's questions and they may be a little bit redundant, but basically the same with a little different approach, maybe. And before I ask my questions we get back—you've quoted the Secretary several times this morning and I want to quote him also in speeches that I think he made the week of May 20.

And one quote is:

> The most telling argument to me on refineries is the national security argument. That makes sense. We must—we want to make sure that nothing we do jeopardizes the long-term national security of the country. We need a viable refining industry in this country. Nothing we do should jeopardize that.

The second quote of that week is:

> This administration is dedicated to the proposition that we will not allow the refining industry to be damaged by foreign imports.

Now, to follow up on Senator Johnston's statement or question, how low does our domestic refinery capacity have to go before it, and I quote the Secretary, "threatens our national security"?

Mr. Boggs. As I indicated, we do not have a particular number that we could answer that question with. We certainly don't believe that at our current level that that's the case. I think the Secretary's statement that I quoted is indeed in line with those that you used, but noting also that we want to continue our economic advance and give the consumers the benefit of lower prices.

Certainly the lower you go, the closer you get to being concerned. We certainly keep an eye on it, but I can't give you a number as to whether it's another half a million down or a million down, but we certainly continue to monitor it closely, and we can, if this develops, certainly get other opinions and come up with a number.

But because the conditions differ, if we look at it a year from now, the refining number may be different but so would the conditions in the world. I think it's presumptious to give a certain number at this point.

Senator Ford. Did I understand you to say that the capacity is 98 percent of the consumption now?

Mr. Boggs. Approximately. Obviously, we don't know exactly what 1985 consumption is. For 1985, it looks like capacity will be about 98, 99 percent of consumption.

Senator Ford. Is that the operating capacity or operable capacity?

Mr. Boggs. That is the operable capacity. That's the figure the EIA has been using consistently for the past 35 years.

Senator Ford. Well, let me ask you this question. If capacity got near the level where you would consider it dangerous, what would you do?

Mr. Boggs. First, we would probably start saying that. We would examine our options and if we felt that others were not proposing appropriate remedies, we would propose remedies. I indicated we don't think that's where we are now, and we don't at the moment see a strong likelihood of getting there.

But we know there are a series of tools that could be used just as we have those tools to preserve our crude oil supply.

Senator Ford. Have you or any of your Department had a discussion with the Defense Department to try to determine what the capacity should be and where it should be maintained?

Mr. Boggs. We've had ongoing discussions on national security issues, and they have participated in some of these interagency groups. I don't have a particular study or report that I could point to that indicates results on that. It may be that there are some in the Department that I can check out.

Senator Ford. Well, if your Secretary talks about defense and the petroleum capacity of this country is a defensive factor, it appears to me that you all would be interested in that, and that is your primary job, as I understand it, from your Department or your agency, to be alert to those sort of things.

And I would ask that you make some effort to discuss this probability with the Defense Department to see where we ought to be, so that we wouldn't be in danger of having too little capacity at a point of adversity. I just don't understand why it hasn't already been done. If there's nothing in your Department to show that this conversation or this discussion has gone on, then I would hope that it would be done.

Mr. BOGGS. Senator, I will certainly look into that. I know that in the discussions we've had with the Defense Department on strategic petroleum reserve policy the question of what kind of product they need and could they get it has come up, and overall refinery capacity has not been flagged as an issue of major concern. But I will see what kinds of reports we may have on that.

[The information follows:]

The Department of Energy continues to carry out discussions and analyses with the Department of Defense regarding their petroleum product requirements in the event of an energy emergency. These discussions are integral to our plans for dealing with potential emergencies.

It should be noted that the Deputy Director of Energy Programs, Office of the Secretary of Defense, testified on June 21, 1985, before the Senate Committee on Finance that even if U.S. operating capacity falls another one to two million barrels per day, "it would be difficult to argue that a national security threat existed."

The relationship of domestic refining capacity to national security, (in particular, the requirements of the DOD), generally is considered in mobilization analysis activities known as Resource Assessment. This issue is one activity of the on-going Emergency Mobilization Planning Board (EMPB) and will be included in the Federal Resource Assessment System (FRAS) under development at FEMA. In each process, DOD is represented on all appropriate working groups and plays an important role in the establishment of planning scenarios for evaluation and in the definition of Defense requirements for each scenario so evaluated. Other departments, including the Department of Energy, then attempt to identify constraints, if any, on their ability to function successfully as Resource Agencies for specific commodities.

To date, a number of mobilization scenarios have been evaluated and no assessment has identified domestic refining capacity as a potential resource constraint.

In addition to the departmental effort to develop the FRAS in cooperation with FEMA, the DOE recently prepared the Federal Energy Resource Management Manual (FERMM), which describes the policy for and method of implementing the provisions of Section 101(a) of the Defense Production Act (DPA). This working document was prepared through an inter-agency task group which was co-chaired by the DOE and the DOD. The FERMM establishes principal reliance on free market mechanisms to resolve problems in supply of energy for National security and defense, and also establishes an energy priority system for applying the authority of the DPA to obtain defense energy requirements if they cannot be obtained through normal market procedures. These priorities would be used sparingly and only if necessary for the National defense, and do not include any use of the allocation authorities of the DPA.

The DOE has also been working closely with the Military Traffic Management Command's (MTMC) Contingency Response (CORE) program, which brings together representatives of the transportation industry, the Department of Transportation and the DOE under the aegis of the MTMC to develop plans for the use of civilian modes of transportation within the continental U.S. to support a military mobilization. The DOE sits with the CORE group to plan for the resolution of defense transportation energy problems which may arise through the use of these transportation modes.

DOE maintains a continuing working relationship with the DOD Energy and Transportation Policy Office (OASD/MI&L) to provide mutual support towards the resolution of questions arising from a variety of energy related questions, ranging from the expedited review of possible requests for waivers of the provisions of the Jones Act during a drawdown of the Strategic Petroleum Reserve (SPR) through obtaining civilian ship utilization forecasts by the Military Sealift Command to providing a liaison with other elements of the DOE, such as EIA.

Additionally, both the Departments of Energy and Defense participate in periodic exercises which test our programs and our ability to respond to emergencies of various types, including those involving general mobilization. For the Department of Energy, these exercises revolve around the appropriate use of the Strategic Petroleum Reserve.

Senator FORD. Do you or do we really have a free market in this country in petroleum products if foreign-controlled national oil companies can, if they desire, sell petroleum products here at a price less than our refiners can buy the crude oil?

Mr. BOGGS. You don't have a perfectly free market. You have that possibility in every product that is traded in the world, and we have a pretty elaborate system of international trade measures to try and deal with it.

Senator FORD. What are those measures that you try to deal with, use to deal with it?

Mr. BOGGS. I'm referring to the activities of the International Trade Commission, Commerce Department, and the Special Trade Representative. For every product that we import, there are ways of measuring whether there is "illegal dumping" going on, and to apply the remedies that are permissible under our laws and under international agreements.

That's not the area that I'm most expert in. It may be that Ms. Stern or others could address them.

Senator FORD. You indicate your remedy is just a lot of talk and not much action. There doesn't seem to be much muscle behind it.

Mr. BOGGS. The question is, what is the action for which a remedy is sought? You have to have a conviction before you can have a penalty, and that's what these agencies are designed to do, to indicate whether what has occurred is indeed an offense under our laws or under the international trade arrangements.

Senator FORD. Well, conviction has two connotations. One, you're guilty of something; the other you're determined to get something done. And I hope that you're not guilty of not trying to get something done.

Mr. BOGGS. It all depends on what that something is, Senator.

Senator FORD. Well, I hope it's in the best interest of this country, and we can keep waiting till what happens tomorrow and look at it today, and see what's happening today and what's going to happen next year, and get all these predictions. And Senator Johnston gave three scenarios there, so you could always be right.

Now let me go back to your prepared statement just a minute. It says that gasoline and blended components have risen to about 380,000 barrels per day in 1984. Now I think I've quoted that correctly.

Now the data I have from the—and you've quoted the Energy Information Administration several times this morning—indicates that gasoline imports and blend stocks in 1984 were 371,000 barrels per day rather than the 380,000, but that there are other so-called blendables which added another 107,000 barrels per day. Naptha imports suitable for gasoline added another 89,000 barrels per day, for a grand total of almost 600,000 barrels per day in 1984.

Now let me ask you this. Are you confident that these blendables aren't also being used as gasoline blending stocks?

Mr. BOGGS. We're certainly confident that some portion of them are.

Senator FORD. You're confident that they are, so that goes beyond the 380,000?

Mr. BOGGS. Some portion. There are a couple of other areas even beyond the one you mentioned in terms of unfinished oil, some of which may be going into gasoline.

Our judgment would be that somewhere in the range of 500,000 to 600,000 is probably what is going into gasoline from all sources. For those additional sources it's a matter of judgment as to how much of them is going into gasoline, because some portion were being imported for nongasoline purposes, let's say, 5 years ago.

So it is a matter of judgment, but you are certainly correct that some amount above the pure gasoline and blend stocks is going into gasoline, yes, sir.

Senator FORD. The cost of refining those products in other countries is tremendously lower than ours; is that correct?

Mr. BOGGS. I believe that there is some discussion of that in the ITC report, I thought. It's certainly somewhat lower. I wouldn't have the quantification at my fingertips, but I believe that there's some discussion either in that or in another report that I saw. The wages in most cases are lower.

Senator FORD. You have Saudi Arabia at about $4.40 to $7.65 a barrel, is that correct, and ours is somewhere between $30 and $32?

Dr. STERN. For the petroleum products, $4.40 and $7.65, yes.

Senator FORD. And then you add China and other nations as well.

Dr. STERN. That's right. That's from Table 8 of our written statement, yes, sir.

Senator FORD. Now, Mr. Boggs, you stated a few moments ago if capacity is increased OPEC will have to increase crude. Why should they do that? Why couldn't they just increase products?

Mr. BOGGS. I indicated that if the United States, by one means or another, reduced its imports of petroleum products, we would have to get more crude oil from somewhere in order to maintain the same level of production. Unless we drove up prices very sharply, we would only get a small portion, if any, from the United States. So we would have to be importing more crude oil from somewhere in the world, and at the margin the places in the world that have the additional capacity to produce more crude oil are OPEC countries.

Senator FORD. Let me ask my question again. Why would they not sell us products instead of the crude?

Mr. BOGGS. I thought I understood that we were starting with the hypothesis that the United States imposed some type of control by tariff or quota.

Senator FORD. That was yours, not mine.

Mr. BOGGS. I thought that that was where the question was starting. If not, I'll start over.

Senator FORD. Well, let me just ask you this question, then. If we needed some increased crude, why would the countries want to increase the crude sale to us and not the products? Why should they sell us their crude when they can sell us the products?

Mr. BOGGS. All right. You're asking if U.S. demand increases, absent other factors, then how would that be met. It's certainly possible that countries would want to sell us more product, but I would point out that once the refineries are built they're going to want to be selling those products in any event.

If our demand goes up separately, people would have to build new refineries to meet them, and that's a very speculative and risky business. In fact, we've seen the Saudis and others refuse to go out and start up new construction.

So the issue is, if demand rises independent of all other factors, which is easier: to decide to build new billion dollar refineries or to open the valve on your crude oil, when you have a whole world of crude oil competitors out there, many of whom appear to be quite significantly eager to increase that production a little bit.

Senator FORD. Well, there's something that I haven't been able to put my finger on here that is an impression I get, Mr. Chairman, is that as our capacity declines that whatever happens we're going to be all right, and it's a free market and so therefore if we can't refine it, then we'll find it from someplace else. It's going to be very easy for us to get it, and really nothing for us to worry about.

Something about that bothers me, and I think maybe it's the word "defense". And I see the problem increasing rather than decreasing as we begin to dismantle all of our ability, most of our ability for synthetic crudes, synthetic liquification, those sort of things, and we keep getting ourselves into the posture where those that are now refining are going down.

What is our industrial complex capacity today? Do you have any idea what the percentage of our industrial complex production today?

Mr. BOGGS. You mean of the whole industrial base? Commerce puts those numbers out. I think it's about 80, 81 percent—80 to 81 percent—of the utilization of U.S. industrial capacity, and that's probably the highest in 3 or 4 or 5 years.

Senator FORD. During this Administration?

Mr. BOGGS. A good bit of the previous one, too.

[The information follows:]

As shown below, the capacity utilization rate for total industry was 81.6 percent in 1984, the highest level since 1979.

Capacity utilization rate

[Percent]

Year:	*Total industry*
1979	85.9
1980	80.2
1981	80.2
1982	72.1
1983	75.3
1984	81.5

(Source: Federal Reserve System data, published in U.S. Executive Office of the President, *Economic Report of the President 1985*, p. 283.)

Senator FORD. Not necessarily. That's not 80 percent. I think refineries are the best example of the reduction in the capacity in this country, and that also bothers me some.

Thank you, Mr. Chairman.

Senator NICKLES. Thank you, Senator Ford.

Senator Rockefeller.

Senator ROCKEFELLER. Miss Stern, in your statement on page 4 you have where it talks about examples of prices resulting from the pricing mechanism——

Dr. STERN. Yes, sir.

Senator Rockefeller. You go down that list there. Canada, Mexico, Saudi Arabia, Kuwait, et cetera. It all seems to be focused in terms of Canada, where they have a domestic crude petroleum price of $30 to $38, export $29. Then you go down to some of the others, and it's way out of whack the other way.

The question is, Does that mean in effect that the only country which we are really talking about which might approach countervailability would be Canada or, phrased differently, what would the figures have to read, if you can answer this, with respect to Canada and its pricing in order for a domestic refiner to win a trade case and have countervailing duties apply?

Dr. STERN. As I understand—the Department of Commerce determines whether there is a subsidy, an unfair act, involved. We at the International Trade Commission get into the question of whether the imports which are coming in unfairly are materially injuring the domestic industry, so I will try to characterize in answer to you what in effect the Department of Commerce determines.

It is my understanding that the Department of Commerce has not even gotten into this calculation because they have chosen over the last couple of years when allegations have come before them of a subsidization, alleged subsidization of either natural gas, crude petroleum, even timber stumpages, for example, that if it's not targeted to a particular industry but, rather, the program is available in general, then it is not, to use the term of art, countervailable under U.S. law.

They will not counteract it with a duty under title VII of the Trade Act of 1980, as amended again in 1984. This was the subject of an effort to change the law last year. It failed. And, as I understand it, Congressman Gibbons has reintroduced refined language on this.

So in answer to your question on the calculations, they didn't even get to it, as I understand it. It was a decision that, unless it is targeted to a particular industry—then it would be considered unfair. If it's available generally, it is not an unfair act, not a subsidy.

Senator ROCKEFELLER. OK. Thank you.

Dr. STERN. If you would like the specific calculations on the Canada prices, as I said it's highly hypothetical at this point.

Senator ROCKEFELLER. Understood. Thank you.

Secretary Boggs, it seems that in your testimony you're kind of giving a snapshot of where we are today, and I guess it would be pretty hard to argue what you said, that the current U.S. refinery capacity approximates current public demand. But those of us from Appalachia are always a bit nervous when somebody says that only 5 percent of products come from imports and therefore that doesn't constitute a real concern.

Some of us can remember when steel and other import levels were at that level and now, of course, it's up at 30. So the whole question of imports of any sort are of concern to us, whether they be oil products, petroleum products, coal, steel, whatever it might be.

Now you indicated in the East-West Center study that the natural markets for new refining capacity that is being built in the Middle East would be most naturally Europe and the Far East. Now I understand that, you know, the Far East gobbles up any crude it can get, but when you get to petroleum products the Far East and Europe in fact are those particular places which really have more strict import policies than in fact the United States itself, and that therefore, if that's the case, that Europe and the Far East may not end up being the target for those exports, but rather the United States itself.

Do you disagree with what I've said?

Mr. BOGGS. Japan currently has very strict controls, amounting in many cases to bans. Europe differs somewhat, country by country, but I think it would not be fair to say that they are substantially more stringent. Other countries in the Far East differ.

Through the International Energy Agency, we've been working to try to have countries maintain an open policy so that products are not channeled to those countries that retain open policies. The Europeans have generally been helpful in that effort.

I could provide you with specific listings of the different European countries' policies, but I think it would not be fair to lump Europe together with Japan as far as their practices on product imports.

Senator ROCKEFELLER. But would it not be fair to say that both of those areas in general terms are more restrictive in terms of their import policies than are we with respect to petroleum products?

Mr. BOGGS. For Europe I'm less sure. As I say, they differ by countries, and we could provide you that. But I did not have the impression that in general you could say that about Europe.

Senator ROCKEFELLER. Could you provide me with that information? I would be grateful.

Mr. BOGGS. Surely.

Senator ROCKEFELLER. Thank you.

Senator NICKLES. Thank you, Senator Rockefeller.

Senator Bingaman.

Senator BINGAMAN. Thank you, Mr. Chairman.

Let me ask Secretary Boggs a question. The first chart after your testimony is entitled Figure 1, Imports of Petroleum Products, 1949 to 1984. The way I read this, distillate fuel oil, motor gasoline, and all other petroleum products, as they are designated there, the imports of those three categories are higher today than they've ever been in our history. Is that your understanding?

Mr. BOGGS. That is probably the case. I have not read that chart from that point of view, but the direction of effect would be right. That is, residual fuel oil has been going down and gasoline has been going up.

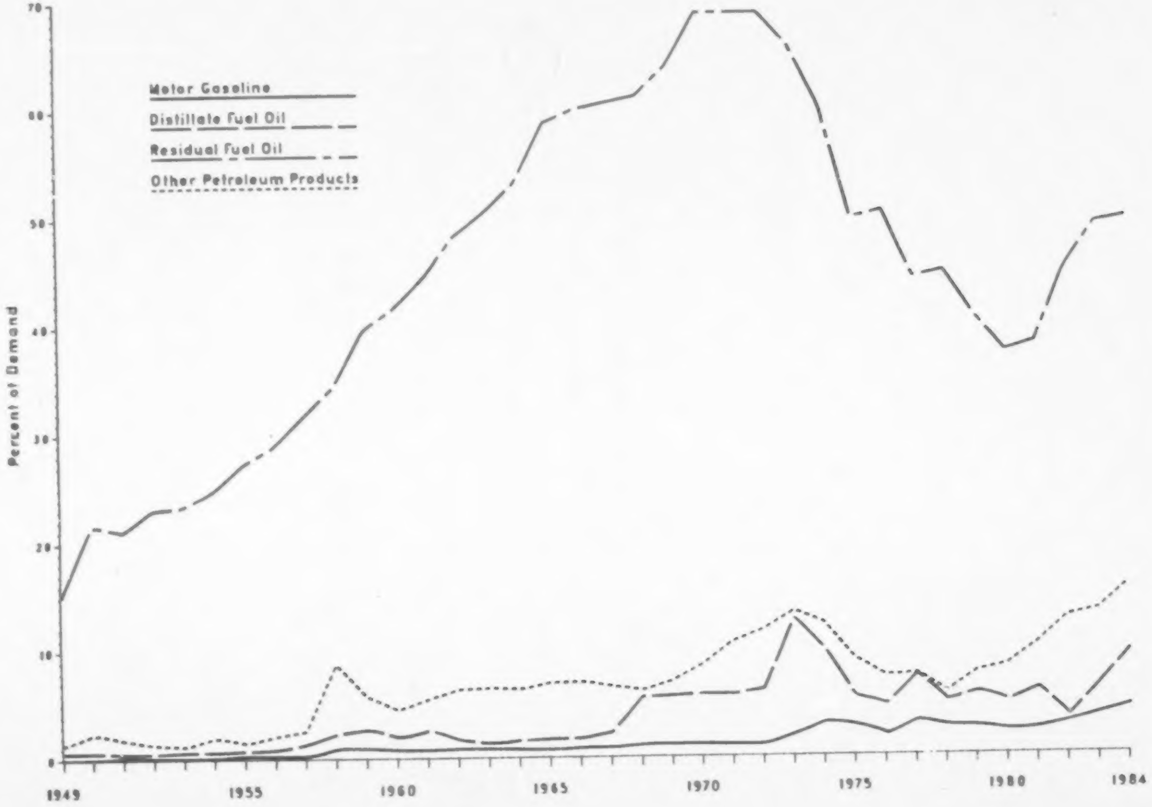
Senator BINGAMAN. Well, let me say on those three categories as you use them in this chart, is it fair to say that the demand for those in this country has not risen significantly as these imports have risen very dramatically in the last few years?

Mr. BOGGS. It varies somewhat by product. Some of those products are up from a couple of years ago, although down from 1973. I'm not sure I would read the chart as showing dramatic increases. There certainly are some significant increases. We could try to lay that out in a chart that's specifically directed toward that.

We have produced charts that show import penetration by product as a percentage, which sounds as though it's getting to the question you are asking. That is, what degree of the market are imports taking? And in gasoline it's certainly gone up on a percentage basis quite dramatically, from 1 or 2 percent to 7 or 8 percent. On distillate, I'm a little less clear.

[The information follows:]

The following chart shows gross imports as a percentage of specific petroleum products supplied from 1949 to 1984



Gross Imports as a Percent of Individual Petroleum Product Demand, 1949–1984

Senator BINGAMAN. What is it on, ammonia?

Mr. BOGGS. I wouldn't know that. We could get it. I think Agriculture may——

Senator BINGAMAN. Would Chairman Stern have any information on that?

Dr. STERN. I don't think I have it off the top of my head, but we can provide it for you. We'd be happy to.

Senator BINGAMAN. OK. I just had the impression that we import a very high percent of the ammonia consumed in the country. Is that wrong?

Mr. BOGGS. Well, it depends on what "very high" is. I would certainly guess that it's a lot less than half, but that's just a guess.

[The information follows:]

According to figures supplied by the International Trade Commission, net imports of anhydrous ammonia accounted for 14.7 percent of apparent domestic consumption in 1984. In three of the past five years, net imports of ammonia supplied only about 7 percent of domestic consumption.

Anhydrous Ammonia
(Thousands of Short Tons)

Year	Imports	Exports	Net Imports	Apparent Consumption*	Net Imports As Percent Of Consumption
1980	2,337	828	1,509	20,411	7.4
1981	2,091	616	1,475	21,017	7.0
1982	2,113	742	1,371	19,056	7.0
1983	2,639	363	2,276	16,087	14.1
1984	3,283	533	2,750	18,750	14.7

*It should be noted that ITC derives apparent consumption by adding net imports and production. No adjustment is made for changes in stocks.

(Source: U.S. International Trade Commission, Potential Effects of Foreign Government's Policies of Pricing Natural Resources, May 1985, p. F-Y.

Senator BINGAMAN. Did you have something?

Dr. STERN. No. I was reflecting that it has been increasing and we in fact had an investigation back in the early 1980's on the subject. But the most recent figures I'd have to get for you.

Senator BINGAMAN. Would either of you know what percent of the ammonia imported comes from the Soviet Union?

Dr. STERN. It's—I don't have it off the top of my head. That was the subject of our investigation. But there were new ammonia sources which were coming in from Trinidad and Tobago, so it may have changed. So we'll get that for you.

[The information follows:]

UNITED STATES INTERNATIONAL TRADE COMMISSION

WASHINGTON, D.C. 20436

June 20, 1985

Honorable Don Nickles
Chairman, Subcommittee on Energy
Regulation and Conservation
Committee on Energy and Natural Resources
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

At the hearing before your Subcommittee on Energy Regulation and Conservation on June 4, 1985, I indicated that I would provide the attached response for the record.

I enjoyed testifying before the Committee very much. If I can be of any further service, please let me know.

Sincerely,

Paula Stern

Paula Stern
Chairwoman

Subcommittee on Energy Regulation and Conservation

Senate Committee on Energy and Natural Resources

June 4, 1985

Question 1:

What share of apparent consumption of ammonia was accounted for by imports?

Answer:

In 1984, imported ammonia accounted for 18 percent of U.S. apparent consumption.

Question 2:

What percent of imported ammonia comes from the Soviet Union?

Answer:

The Soviet Union supplied 30 percent of imported ammonia in 1984.

Senator BINGAMAN. OK. Chairman Stern, let me ask you a question or two. What percent of the $123 billion of trade deficit we had last year was from oil and petroleum products?

Dr. STERN. I will have to provide that figure. Do you have that off the top of your head?

Mr. BOGGS. I have that one.

Dr. STERN. I know the new figure just came out.

Mr. BOGGS. I can do that one. For 1984, it was $52 billion in energy, $56 billion in everything else. So energy was about 50 percent, which is the lowest number it's been in probably 15 years.

Senator BINGAMAN. 52 and 56? That doesn't add up to 123. What's the rest?

Mr. BOGGS. 108 is the number given here. I'm not a trade expert, but there are two ways of counting the trade deficit. One is whether you count the cost insurance and freight on one side and not on the other side, and the Commerce basis differs from somebody else's basis. But the relative amounts would be the same.

This is a tally that we print every month off of one of those bases, and it does add up to 100 percent of what we understand to be the deficit.

Senator BINGAMAN. Let me ask Chairman Stern on this study that you just did for the House Committee on Trade, do you—do you make any policy recommendations or reach any policy conclusions as a result of your finding of these subsidies by foreign companies or countries?

Dr. STERN. No, sir, we didn't. We were not asked to.

Senator BINGAMAN. What if I were to ask you to?

Dr. STERN. I beg your pardon?

Senator BINGAMAN. What if I were to ask you to? Do you conclude that there's anything wrong with our laws or the way we're administering them when you can have in the case of Mexico, for example, a $6 or $7 per barrel oil going into the production of cement?

Dr. STERN. I think I'm not in the position of making policy. I'm in the position of administering the law as it's written. Nor am I a spokesperson for the administration, since we are an independent Commission and not a part of the Executive branch at all.

I think that from one point of view, it looks very much like a subsidy and therefore people would consider it unfair. From another point of view, it's considered a comparative advantage of a producer that has a very cheap raw material that goes into a product that it can get a foreign currency for in order to pay off it's country's debt. Perhaps even in certain cases—not in cement but other petroleum products—it also is a means of getting around the OPEC crude petroleum production quotas or price requirements.

I would see that there would be many reasons why a nation would try to capitalize on its comparative advantage. I think it really is a policy question which I think the policymakers will have to decide.

Senator BINGAMAN. That's all I have, Mr. Chairman.

Senator NICKLES. Thank you very much.

Senator Evans.

Senator EVANS. Thank you, Mr. Chairman. I'll not have very many questions.

Let me approach all of this from a different direction. It seems to me that there are two concerns that are sort of interlaced here. One is the economic concern of domestic refiners worried about unfair competition; the other is the somewhat related concern that I presume you have from the Department of Energy as to the security of the country, adequate refining capacity if we were to be shut off from those who would, you know, bring refined materials into the country during some kind of an emergency.

That latter is a concern of yours?

Mr. BOGGS. Yes, sir.

Senator EVANS. You perhaps have answered this earlier today, but at what point or at what level related to current consumption does this become a problem?

Mr. BOGGS. I think I've indicated previously that as with overall oil dependency it's not something we think we can put an absolute level on. I think you have to look at the fact that our primary dependency comes from our reliance on foreign oil, whether crude or product. And while we have reduced that from about 50 percent to less than 30 percent, it's still at a level that causes us concern.

We'd like to see it go down further. At the same time, there are significant costs in trying to drive it down further. Refining capacity is one aspect of that, and what I think we tried to indicate is that refining capacity is in fact more broadly distributed and likely to be less subject to specific interruption than the crude oil supply itself.

So that while we continue to look at refining capacity, it's only one portion of our overall oil dependency concern.

Senator EVANS. Would an alternative way of getting at this problem be to reduce the dependence, in other words reduce our consumption?

Mr. BOGGS. Certainly that would address the overall issue. I'm not at all sure it would make the refiners any happier or necessarily change dramatically the question of concern about refining. Frankly, if we dropped our demand substantially I would expect to see the closure of domestic refineries accelerate, other things being equal. It's been that decline in demand which has been the overwhelming cause of the closure of refineries heretofore.

Senator EVANS. Would you say that the closure of refineries here with that reduced demand has resulted in the remaining refiners, the remaining mix of refiners being considerably more efficient than the mix that we had before?

Mr. BOGGS. No question about that, because in a time of pressure those that are less competitive get less operation, and those that are more competitive get more operation.

Senator EVANS. But certainly reduction of consumption would be a desirable goal on the security side of things?

Mr. BOGGS. Depending on at what cost. Other things being equal, yes.

Senator EVANS. Would you consider that continued requirements for fuel efficiency would be a costly item?

Mr. BOGGS. That's normally what we have consumers decide, whether purchasing a given product is more costly or less costly for them than some alternative. It obviously varies consumer by consumer, but basically that's the way you have a market operation.

You have monetary costs that you can try to quantify. You have time costs that are harder to quantify. You have preference and satisfaction costs that are even harder to quantify.

Senator EVANS. Do you think the market always gets appropriate signals?

Mr. BOGGS. It depends on what's keeping them from getting there, keeping the signals from getting through, and the market is only the aggregate of the perceptions of people. So they certainly can be wrong.

Senator EVANS. Do you think it was inappropriate, then, to continue to work on or to require an kind of fuel efficiency standards?

Mr. BOGGS. As we've indicated, we don't think that this is a measure that this administration would have undertaken.

Senator EVANS. Do you think it was effective?

Mr. BOGGS. At some times it was effective in the sense that companies changed their mix to try to comply with it. It was effective in the sense that markets were altered. I think currently the Japanese are selling more big cars and American companies are selling less big cars than they would in the absence of those standards. So it's been effective in causing that.

Senator EVANS. Well, perhaps, Mr. Chairman, we are getting a little bit off the current topic.

Senator NICKLES. I noticed.

Senator EVANS. But I just wanted to try to relate the whole question of refining capacity, at least insofar as it relates to security, is really reflected, really reflects our consumption patterns, and the rate of consumption, to the degree those are diminished or go down, maybe we would have a corresponding reduction of refining capacity in this country.

But would you say probably we would be better secured than we are today if consumption patterns were to drop by ten or 15 percent?

Mr. BOGGS. Certainly if consumption was lower, our proportion of dependence on total oil imports would be lower; no question about that. The question of exactly what would happen to our refining capacity as opposed to others in the world would be much more difficult to ascertain because, of course, what we do affects the whole world oil market.

Our decline in consumption has affected the refining capacity in other countries as well. As we have backed out of the use of residual oil in our electric system, the countries that used to send us all that oil have borne the brunt of it.

Senator EVANS. Would you say that if that were to happen and if our refinery capacity were to be reduced, is there a substantial additional efficiency level that we would reach with the average refineries, or has most of that been taken out with the reductions we've already gone through?

Mr. BOGGS. That would be tough to measure. There's obviously some difference. At any time, somebody is always No. 1 and somebody else is No. 2. But I don't think average efficiency is a goal in itself. That is, it wasn't in order to raise average efficiency that these other refineries closed. They closed because they could not produce product at a price that was competitive.

Senator EVANS. I know. They closed because they are inefficient at the margin. But that results in——

Mr. BOGGS. They couldn't meet the competition.

Senator EVANS. That results in certainly greater efficiency of those that remain. I was just curious as to whether a lot of that's already been wrung out of our domestic industry.

Mr. BOGGS. I'm sure a great deal of it has. As I say, there is obviously some spread.

Senator EVANS. Thank you, Mr. Chairman.

Senator NICKLES. Thank you, Senator Evans.

To all of our colleagues, we all have obligations and caucuses and so on. We also have nine additional panelists. It is my intention to finish this hearing today.

Senator Johnston, do you have anything?

Senator JOHNSTON. Yes, I just had one comment, Mr. Chairman, and that is this; that we have built a domestic refining industry at a cost of billions of dollars. It is in the national interest, it has been found to be so by the Secretary of Commerce, I know in 1975, again in 1981, and I requested a further section 232 of the Trade Expansion Act hearing from Secretary Baldridge, who referred back to those two previous findings.

That is, that imports were threatening the national security, and he said it was not necessary at that time to have a further investigation under section 232 because the President "may rely on the findings of the two previous investigations" to "take such action and for such time as he deems necessary."

And that is to say that he can put on fees or tariffs or whatever he wishes under the Trade Expansion Act. Now it may be very true that under the Tariff Act of, I think it is, 1932, the countervailing duties, that this is, these actions of selling crude oil to their own refiners at much below market prices are not countervailing or do not countervail because you can buy, I guess, refined product inside Saudi Arabia or Mexico at a lower price.

Our refiners can't buy the crude oil in Saudi Arabia or can't buy it in Mexico at the lower price, and it seems to me we're sitting here like chumps letting billions of dollars of our refining capacity essential to the national security get run out of business while we do what, talk about whether that's a comparative advantage.

I say baloney. We're chumps if we let them do that. We ought either to take the action presently authorized by law under the Trade Expansion Act and put on a fee or a quota, or else amend the Tariff Act of 1932, or whichever that act is, to require the administration to do it.

Or, we can take some action in the jurisdiction of this committee and I'm thinking about legislation at this time which would require that if somebody imports a great deal of imported product that they also have to put in storage a proportionate amount in order to compensate for the threat to the national security that would be required in case that supply is cut off, which might be some degree of discouragement to import a great deal of imported product.

So I would just urge the administration to do something about what is a clear threat to the national security, clearly not in our economic interest, and in the name of free trade, in the name of comparative advantage, we certainly don't need to hurt and kill our domestic refining capacity.

Thank you, Mr. Chairman.

Senator NICKLES. Thank you, Senator Johnston.

Secretary Boggs, Commissioner Stern, I appreciate your appearance before this committee. I have additional questions and would appreciate your response. Other committee members may as well.

On our next panel we have Mr. John Hall, chairman and CEO of Ashland Oil; Mr. Bill Tell, senior vice president of Texaco; Mr. Leonard Steuart, president of Steuart Petroleum; Mr. Phillip Rathburn, commercial director of Dow Chemical; and Mr. Nolan Hancock of the Oil, Chemical and Atomic Workers who is accompanied by Mr. Bill McGough from Tulsa, OK.

To all of our panelists, I apologize for the fact that, as usual, a lot of times this committee is very lengthy on the first panel and hopefully we will not take as long on the rest of our panels, because we have 10 panelists and really just a little over 1 hour. So if you would all put in your statements into the record in full, as if read, we will include them in the record and you can then summarize. It will certainly be appreciated by this Senator.

Mr. Hall, I wonder if I might impose. I know Senator Ford was wanting to be here for your statement. If I could just skip you just for the time being, we will come back to you as soon as Senator Ford gets here.

Mr. TELL. Thank you very much.

STATEMENT OF WILLIAM TELL, JR., SENIOR VICE PRESIDENT, TEXACO, INC.

Mr. TELL. Thank you very much, Mr. Chairman. My name is William Tell. I'm senior vice president of Texaco. I'm pleased to have the oppportunity to appear before the committee this morning.

I would like to direct my comments to the perspective of an international oil company to the issue that has been discussed with the first panel. Texaco has 10 operating refineries in the United States at the present time. We refine right around 1 million barrels a day. We would certainly rank as one of the very largest of the domestic refiners.

We also have equity interests in more than 30 refineries outside the United States. We have more refining capacity outside the United States than we do inside the United States. And to some extent I guess it might even be said that we would financially benefit if the United States were to permit its domestic refining base to deteriorate to the point where those that had refining capacity outside the United States were coming into more of a seller's market.

But, as a U.S. company and one that has very painful memories of the 1970's, we felt the responsibility to come forward and share with you our assessment of the problem. We see it as something much more than economic threat to the domestic refining group. We see it presenting serious policy questions, not only with respect to trade policy but with respect to national security, with respect to energy policy, and certainly with respect to the strength of our economy.

And I have attempted to identify in our statement the policy questions that we hope can be promptly addressed by responsible public officials, because what we see today is drift, and we see time running down. And these are very complex questions and judgments need to be made. Until those policies are changed, as businessmen we're doing what you might expect and what the market would dictate.

Texaco has closed five refineries in the United States since 1981. We have closed two this year. In addition, we have decommissioned 200,000 barrels a day of capacity at our largest refinery at Port Arthur, TX. If you look at the financial condition of the domestic refining industry today, and there have been well over 100 refineries already closed, I see nothing that would suggest that these trends are about to level off or reverse.

The margins in the industry are thin, if not negative. You have seen already financial pressures leading towards a significant decapitalization in the energy industries. In fact as much as $20 billion within the last year has gone out of this industry because investors do not see returns that would seem to justify those investments continuing.

The industry is, in addition, faced with Superfund tax proposals. It's faced with a new/old investment recapture windfall tax which will be a very major burden on the refining sector since it's been one of the largest sectors for the investment within the past 5 years.

Now that's the backdrop with which we've got to make some judgments, and I think the panel asked the right questions. How much capacity do we presently have in the United States and where is the level at which we start to be concerned? I think it's important that we firm up pretty quickly now just where that level is.

We've had excess refining capacity, as much as 25 to 30 percent, for several years now, and that excess capacity, if it's not maintained, it deteriorates very quickly. And I think and I hope that these studies will be made. When you get behind the reported statistics, you're going to see a lot of phantom capacity, capacity that may be reported but if it got right down to really being able to run within a short period of time, it's not there.

Now what are the most recent numbers? The Energy Information Agency within the last 4 to 6 weeks indicated at yearend 1984 that was 15.4 million barrels of operable that's operating or that could be brought on within 90 days. Since the first of the year, we've closed two refineries, and I know that there have been many others.

In our best judgment, the operable capacity today is probably somewhat below 15 million barrels a day, and if you recognize that these refineries at best can run only 90 percent of the time because of test and inspection, we probably have operating capacity of 14 million barrels a day or less, and we have the specter of 1 million barrels a day of light products coming into the world from the new OPEC refineries within the next 18 months, and the U.S market, with the hard currency and the open door, clearly has to be a very, very attractive place.

Now it doesn't take a full million barrels a day to come in to shut down 1 million barrels a day of capacity, because refineries don't make just light products, as you know. We have probably the most efficient refining system, and we can make 75 to 80 percent. But if you had 600,000 to 700,000 barrels of that million come to the United States, you just put down another million barrels a day of refining capacity in the United States.

That's at risk today, and those decisions are going to be made not 1990. They're going to be made by businessmen in the next 18 to 24 months. And our government, I hope, will have a policy, some sense for businessmen to make a judgment upon, whether we're indifferent, we're going to let the market take care of the situation, or whether we think that there is a minimum base of refining capacity that the national security of the United States requires.

Now I want to also emphasize let's look at the source where these product imports are coming from. We can go back to 1973 and say well, gee, we're not importing as much as we were in 1973. In 1973 it was an aberration. That was the year that domestic crude production was peaking. We had a mandatory oil import quota. We didn't have enough crude to run our refineries, and we imported product and we shorted ourselves and we got into a mess.

Then to say until we get to the 1973 levels there's no problem, that just doesn't make any sense whatsoever. We're shifting. In 1973 it was mostly residual oil. It was coming from the Caribbean, mostly U.S. possessions, the Virgin Islands and Puerto Rico. Today, 1984, 50 percent of the product imports are long haul. They're not Western Hemsiphere. They're not secure sources. And when you put that new million barrels a day of OPEC light product production into the world market, a large percentage of it coming here, you're going to have most of it long haul and most of it from Government-operated refineries.

And that's a key difference in determining what pricing policies you might expect to have followed if you permit yourself to become dependent on foreign product sources that are mainly run by foreign governments but have their own agendas and have already shown at the upstream a willingness to engage in cartels.

I see my time has expired. I'd be pleased to participate in the questioning period at the conclusion of the panel.

[The prepared statement of Mr. Tell follows:]

STATEMENT OF WILLIAM TELL, JR. SENIOR VICE PRESIDENT, TEXACO INC.

Texaco appreciates the opportunity to provide its comments to the Subcommittee and to review a number of serious national policy issues presented by the sharp increase in petroleum product imports into the United States combined with the accelerating decline in U.S. domestic refining capacity. The growing dependence by the U.S. on petroleum product imports raises concern in the areas of trade and economic policy, energy policy and national security. This Subcommittee's responsibility with respect to energy policy makes these hearings timely and appropriate.

SIGNIFICANT TRENDS

Volumetric Growth in Product Imports

In 1984 gasoline imports into the U.S. averaged over 309,000 barrels per day (BPD), an increase of 38% over 1983. This increased to 379,000 BPD in the first quarter 1985, an increase of 33% over the 285,000 BPD level in the first quarter of 1984. Middle distillate imports, such as diesel fuel, heating oil and jet fuel, averaged 255,000 BPD, an increase of 70% over 1983 levels. These amounts are much greater when partially refined product imports such as naphtha and blending stocks are included. Charts 1, 2 and 3 further detail the increasing trend in U.S. petroleum product imports.

Domestic Refiner Margin Squeeze

Gasoline imports in the 1960's and 1970's supplied 1 to 2% of U.S. demand but have risen to as much as 8% of total U.S. demand when blending stocks used in marketing gasoline are included. Analysis of current trends indicates a continued upward movement in product import dependence in 1985 and beyond. Gasoline imports are primarily directed at the U.S. East Coast where they no approach 15% of demand when imported blending stocks are included. In 1984, imports supplied 15% of all regional light product demand in PADD I.

The increasing flood of product imports has exerted significant downward pressure on refiner margins in the U.S. For the first quarter 1985 a number of the majors experienced continued losses or reduction in earnings in the downstream sectors (See Chart 8). In today's highly competitive marketplace, it is the price of the last barrel seeking to enter the market which can determine the overall level of prices. These margins would be further reduced if the "recapture" windfall tax on old investment contained in the President's tax reform proposal is adopted.

There is increasing evidence that foreign export refiners seeking access to U.S. markets and the displacement of domestic refined products are offering to sell gasoline, middle distillates and heavy fuel oil at prices sharply below any reasonable estimate of refinery costs. This cost/price relationship is set forth on Charts 4 and 5. Cost absorption of over $3 per barrel by government-owned export refiners appears to be occurring, representing as much as 7½c per gallon. In an attempt to compete against foreign competition which analysis indicates is engaged in sales below cost, domestic refineries are experiencing depressed margins and large losses in widespread instances.

Decreasing U.S. Refining Capacity

Competitive market conditions since decontrol in 1981 have led to an extensive rationalization and contraction of the U.S. refining industry. In 1981, there were 315 operating refineries in the U.S. with a total capacity of 18.6 million barrels per day (MMBPD). By the beginning of 1985, the U.S. had less than 200 operating refineries, with slightly under 15.4 MMBPD of operable capacity, according to the Energy Information Agency. Operable capacity is defined as capacity that is now operating plus idle capacity that could be returned to service within 90 days. There is a significant amount of reported operable capacity which has been shut down since the first of the year or has been idle for such an extended period that a serious question exists whether it could ever be operated again without great expenditures and within any reasonable period of time.

Some reduction in U.S. refining capacity has been required to remove the inefficient facilities constructed during the period of Government controls in the 1970's which artificially stimulated demand and encouraged the construction of small inefficient refineries. Today, however, the U.S. is rapidly approaching the point where future plant closings will involve modern, efficient facilities which simply cannot competitively survive against below-cost, subsidized sales by foreign government export refiners seeking access to U.S. markets. The future configuration of the U.S. domestic refining industry over the next several years may well be largely determined by the policies of foreign governments.

Declining U.S. Crude Prices

Faced with mounting losses, U.S. refiners have reduced the price paid to U.S. producers for domestic crude. The declining trend in U.S. crude prices and the resulting reduction in producer cash flows has led to a sharp reduction in U.S. exploration and drilling activity. Unless these trends are reversed, the U.S. must anticipate higher levels of crude imports in the years ahead which, when combined with the increasing level of product imports, could push the U.S. in a few years to a level of 50% import dependence, a level which the experience of the 1970's demonstrates is an unacceptable dependence on foreign sources.

Construction of New OPEC Export Refining Capacity

In the face of significant excess refining capacity today in major consuming countries, an estimated 2.25 MMBPD of new refining capacity is nevertheless planned or under construction in several OPEC countries and will come on stream in the next several years. One million BPD of this new export capacity will be on stream by the end of 1985. Their strategic objective will be to gain access to consumer markets, including the U.S. The locations of these export refineries in the Middle East and North Africa, as shown on Chart 6, representing 1.4 MMBPD of capacity, are in areas which were the source of crude supply disruptions in the 1970's.

Other exporters of product to the U.S. in recent years include Romania and China. In addition, Russia, at various times, exports large volumes of petroleum products into Europe creating surplus product which, by displacement, often moves to the U.S. Dependence on these areas as an important source of energy supply for the U.S. and Europe can create additional foreign policy and defense costs.

A list of the leading countries currently exporting petroleum products into the U.S. is shown on Chart 7.

Impact of Environmental Investments

During the last ten years, the domestic refining industry has expended over $30 billion for environmental facilities to meet mandated product specifications and to control plant emissions. Additional Superfund taxes and other hazardous substance regulations which are pending will significantly increase the environmental costs of U.S. refineries. A study by Batelle Columbus Laboratories indicates that U.S. refiners incur mandated environmental costs of as much as $1.50 per barrel over foreign export refineries.

Our own U.S. Government is currently providing incentive subsidies favoring petroleum product imports. EPA has granted lead banking credits worth as much as 4.5¢ per gallon to importers of low lead gasoline. EPA recognized that many domestic refiners currently lack the equipment to produce lead-free, higher-octane fuels in accord with its lead phasedown timetable. Therefore, it adopted lead banking provisions for products with lead levels below current standards during the transitional period while domestic refiners install the necessary equipment. Most importers, however are brokers, blenders, and middlemen not engaged in refining who now enjoy a windfall from the banking provisions of up to 4.5¢ per gallon. This permits them to put even greater pressure in the market place on the already depressed margin and cash flow of the domestic refiner--a result contrary to the stated objectives of EPA's lead banking program. This is one more example of the failure of the U.S. Government to have a clearly defined view and policy with respect to the type of domestic refining industry required by our national interests.

Outlook

OPEC crude oil producers in today's market often experience difficulty in selling their available crude at official government prices. Sales discounted from official prices threaten the overall crude price structure. In these circumstances, government operated refineries and processing arrangements provide a convenient basis to veil the discounting of crude prices. In addition, such refineries may also provide an opportunity to realize additional petroleum revenues from exports over and above the sales volumes permitted under the OPEC established crude oil quotas set for member countries. For these reasons OPEC export refineries can be expected to continue to operate at high levels and be expanded. Such refineries are also an important source of local employment and therefore have additional political significance.

The desirability of the hard currency available to foreign exporters from the sale of petroleum products into U.S. markets further suggests that the trend in increased U.S. product imports will continue and perhaps even accelerate. Crude oil and raw material costs represent the largest single component of a refiner's cost (over 80%). There is no way through reduced operating expenses or increased productivity that U.S. refiners can compete against raw material and other subsidies over $3 a barrel.

There exists the potential that growing U.S. import dependence, combined with a shrinking U.S. refining base, will permit establishment of a new "seller's" market in the years ahead. Domestic sales below cost to achieve market dominance are, of course, outlawed under U.S. antitrust laws. It would be ironic if the U.S. were to permit foreign governments to achieve what U.S. policy has prohibited on the part of private domestic firms.

The prospect of increased access to U.S. markets by foreign product exporters is further enhanced by comparatively low import duties and the absence of quotas or other restraints. U.S. petroleum product import duties on gasoline are only 1.25¢ per gallon and were set in 1947 when the wholesale price of gasoline was approximately 10¢ per gallon. These duties have never been increased to reflect price increases and other changed economic relationships since the mid-1940's. Such duty levels could be increased 7-10 times their present levels solely on the basis of changed economic and market conditions since the time they were first imposed. U.S. import duties on petrochemicals average 8 to 10 times higher than petroleum products at present. European product import duties currently are as much as 4 times higher than the U.S. and Japan refuses to admit foreign refined gasoline to enter the country.

Confronted with; 1) mounting losses, 2) increased environmental investments and taxes, 3) the loss of the capital investment incentives provided under current tax laws, 4) imposition of a "recapture" windfall tax on old investment and, 5) continued competition from sales below cost, U.S. refiners will continue to shut down facilities. There may exist an apparent surplus of operable domestic refining capacity as compared to current average daily runs of approximately 12 MMBPD. It is not at all clear, however, that maintenance of the idle units included in the classification of "operable" capacity has been adequate to permit a rapid increase in current crude running in the event of a supply disruption. Moreover, some surplus in refining capacity is required to compensate for the periods when units must be shut down for testing and inspection. Historically, operating at 90% of capacity is about the optimum the industry can hope to achieve. In addition, as much as 3 MMBPD of capacity will be required to run crude oil from the Strategic Petroleum Reserve in the event of a supply disruption. When these factors are taken into consideration, the existing cushion of surplus refining capacity in the U.S. is not very large and may already have reached the level where any further reduction would be contrary to the national interest.

Foreign refineries during a period of worldwide crude disruption may not have crude supplies above their domestic requirements to provide a basis for refining products for export. Moreover the prices demanded for such products will undoubtedly reflect the escalated levels which experience in the 1970's indicates will occur following a supply disruption. The question of how much excess U.S. refining capacity the U.S. requires is complex and not at all clear. What is clear, however, is that once a plant or major unit has been shut down for any extended period of time, it is most unlikely that the equipment would be in a condition to resume full operations in any short period.

Mothballing Refining Equipment

Our review of the requirements for the protection and start-up of idle petroleum refining equipment indicates a significant amount of expense, maintenance and testing is involved to start up an idle plant. Even with adequate mothballing, internal and external corrosion will be experienced.

This corrosion damage and cost to repair or replace equipment removed for use in other facilities increases significantly with time. Other problems encountered when restarting an idle refinery concern recruiting and training a workforce, developing contracts, purchasing catalyst and chemicals and reinstating elapsed environmental permits. This is time consuming and expensive. A minimum of four months is required to restart a refinery idle one year and as much as eight months when idle in excess of two years, excluding any delays resulting from permits, availability of utilities and delivery of critical catalyst and chemicals. Mothballed facilities would provide little assistance in dealing with the type of supply disruption experienced in 1973-74 and 1979.

PROMPT NATIONAL POLICY REVIEW REQUIRED

There is a strong indication that, absent a shift in national policy, the U.S. will continue to drift into a growing and excessive dependence on foreign product imports. Overall, imports of crude and product into the U.S. increased by 8% in 1984, the first increase following several years of decline. The painful U.S. experience with excessive dependence on foreign imports in the 1970's dictates that a policy review should be immediatuly undertaken by responsible officials to determine at what level increased crude and product imports cease to be prudent from the standpoint of economic policy, energy policy and national security. The short-term consumer benefits available from product sales below cost will be more than offset by the longer-term price increases which will occur from excessive import dependence in the event of a future supply disruption or the reestablishment by OPEC of a seller's market. How much longer can existing levels of domestic refining capacity be maintained under the severe margin squeeze and mounting losses resulting from competitive prices apparently based on sales below cost?

A number of economic issues should be included in the policy review. Key areas of the economy will be adversely affected if increasing levels of petroleum imports lead to the reestablishment of a seller's cartel or are cut-off by a supply disruption. These include GNP growth, employment, inflation, interest rates, balance of payments and federal budget deficits.

The policy review should also include an evaluation of current U.S. trade policy in the energy sector together with an appraisal of the practicality of existing enforcement mechanisms to deal with a natural resource subsidy form of unfair trade practice. U.S. Customs procedures relating to the administration and interpretation of existing duties on finished products and blendstocks should also be reviewed. Wide discrepancies and inequities currently exist and are more fully described in Chart 9. Consideration should also be given to the justification and utility of maintaining a Strategic Petroleum Reserve (SPR) at an annual cost in excess of $4 billion if adequate refining capacity is not available to process crude from the SPR during a period of supply disruption.

Finally, there is the area of national security. Whether an imminent national security concern is created at present levels of crude and product imports is a matter upon which differing views have been expressed. In recent Congressional hearings the Department of Defense (DOD) testified its petroleum product requirements would increase four-fold to approximately 2 million barrels per day in the event of a major military mobilization. Moreover, many of the refineries operated by U.S. companies outside the U.S. which were suppliers to DOD in prior years have more recently been closed or sold to foreign governments. These developments place a greater dependence on our domestic refining base.

Those expressing complacency at current levels should be queried as to what point in the future, on the basis of existing trends, our dependence on foreign imports would reach a point where a genuine national security concern exists. What is the criteria policymakers should employ in making such a judgment and what industry operational lead times must be accommodated for any remedial action to be timely implemented?

The timing and form of any remedial measures required to protect U.S. interests in this vital area should be determined by the judgments made in the comprehensive policy referred to above in formulating U.S. policy in these key areas. If analysis indicates the current level of domestic refining capacity should not be permitted to further erode, strong action at an early date would be required.

A listing of some of the more critical issues and questions Texaco believes should be addressed is set forth below. Responsibility for the analysis and resolution of these economic, trade, energy policy and national security issues appears to lie in many different departments, agencies, and committees in both the Executive and Legislative branches of the U.S. Government. Leadership and coordination will be required to ensure that such divided responsibility does not result in the failure of any party to accept responsibility for these difficult and complex matters which vitally affect the national interest.

In the past there has been a tendency to deal with politically difficult problems of this nature only in a crisis. Unfortunately, our Country's inability to address and resolve such problems in advance of a crisis cost the U.S. economy in the 1970's billions of dollars in addition to a loss of policy flexibility and significant additional costs in the areas of both foreign policy and defense.

In the absence of any indication of a policy shift by the U.S. Government, it is reasonable to anticipate that privately owned U.S. refiners will continue the established pattern of plant closings required by the severe margin squeeze and mounting downstream losses. During the 1970's the petroleum industry was widely criticized for failing to warn the public that the U.S. was losing its energy self-sufficiency and the risks associated with a growing import dependence. Texaco believes that current trends and developments in the energy sector contain the potential for a future shortage which could compromise our economic and national security to a greater extent than in the 1970's. We compliment this Subcommittee for holding these hearings to focus public attention on these critical issues. There is urgent need for the policy analysis studies currently underway within the Administration to be promptly concluded in order to permit timely informed judgments to be made.

POLICY ISSUES AND QUESTIONS TO BE ADDRESSED

I. Economic Policy

1. What would be the intermediate and longer term impact in the following key areas of the economy if increasing volumes of subsidized petroleum product imports produce a continuing pattern of refinery closings combined with a reduced level of domestic exploration and oilfield services activity:

   a. GNP growth
   b. employment

2. What will be the impact in the following key areas of the U.S. economy if excessive dependence on petroleum imports leads to the reestablishment of an effective seller's cartel with significant upward movement in energy prices:

   a. GNP growth
   b. inflation
   c. interest rates
   d. balance of payments
   e. federal budget deficits

3. What impact on the following key areas of the economy would result from a supply disruption if combined crude and product imports are permitted to reach a level of 50% of U.S. demand:

a. GNP growth

b. inflation

c. interest rates

d. balance of payments

e. federal budget deficits

II. Trade Policy

1. As a matter of national policy, should we expect our domestic refinery industry to compete against sales of imported products by producer governments which evidence strongly indicates are below cost? Are there any other major U.S. industries which national policy would place in such a position to obtain short-term consumer benefits?

2. Would below cost sales by foreign competitors differ from the practice of predatory prices outlawed by the U.S. antitrust laws?

3. What is the justification for the level of U.S. import tariffs on gasoline and other petroleum product not being revised since 1947 to reflect current economic relationships?

4. What is the justification for the average import duty level on petrochemicals being at least 8 to 10 times higher than petroleum products?

5. What is the justification for European import tariff levels on petroleum products from many sources being as much as four times higher than the U.S.?

6. Why should the U.S. have a completely open door for petroleum product imports when Japan drastically limits the levels of foreign refined products permitted access to its domestic market?

7. Are existing trade laws and procedures adequate to deal with the new phenomenon of below cost sales of petroleum products to gain access to U.S. market?

III. Energy Policy/National Security

1. What is the minimum level of domestic refining capacity required to protect against future economic shocks from the reestablishment of an effective sellers' cartel and insure our national security in the event of a supply disruption?

2. Does an analysis of present trends in petroleum product imports and refinery closures indicate the U.S. may be approaching such minimum level? What are the industry operational lead times that must be taken into consideration in adopting remedial policy?

3. Should the configuration of the U.S. refinery industry be determined by the self-interest policies of foreign governments?

4. What amount of excess refining capacity in the U.S. is required to obtain optimum benefits from the $15 billion investment in the SPR?

5. As a matter of energy policy, is the U.S. satisfied with current levels of domestic drilling and reserve additions? Is there a relationship between depressed refinery margins and the prices paid to U.S. producers for U.S. crude oil? Is reduced cash flow to domestic oil and gas producers a major reason for the dramatic decline in U.S. exploration?

6. What are the odds that at some point in the next 10 years there will be another major energy supply disruption? Is a complacency over current product import trends consistent with this assessment?

7. What incremental demand for petroleum products will occur in the event of a major military deployment, i.e., military requirements, tank-topping by consumers fearing shortages, additional domestic industrial activity required to support military operations?

8. How reliable suppliers of petroleum products are Romania, Russia (into Europe and by displacement into the U.S.), Libya and China?

9. How reliable a product supplier would Canada, Mexico, Venezuela and other Western Hemisphere countries be in the event of a major supply disruption which threatened their domestic requirements? Would the price levels of their products be expected to escalate in the event of a supply disruption?

10. What are the additional military costs associated with insuring U.S. access to foreign crude supply, including the cost of keeping the sea lanes open and protecting against tanker attacks? When these military costs are added to the market price of imported products, are such products less costly to U.S. consumer than domestic products?

11. What limits on the flexibility and substance in U.S. foreign policy are created by excessive dependence on foreign energy sources?

IV. Administrative

1. Specifically, what groups in the Executive Branch and the Congress have responsibility from a policy standpoint for analyzing these issues? What actions or studies in these areas are currently under way?

2. As an institutional matter, can we learn from the experience of the 1970's and adopt appropriate remedial measures in advance of a crisis?

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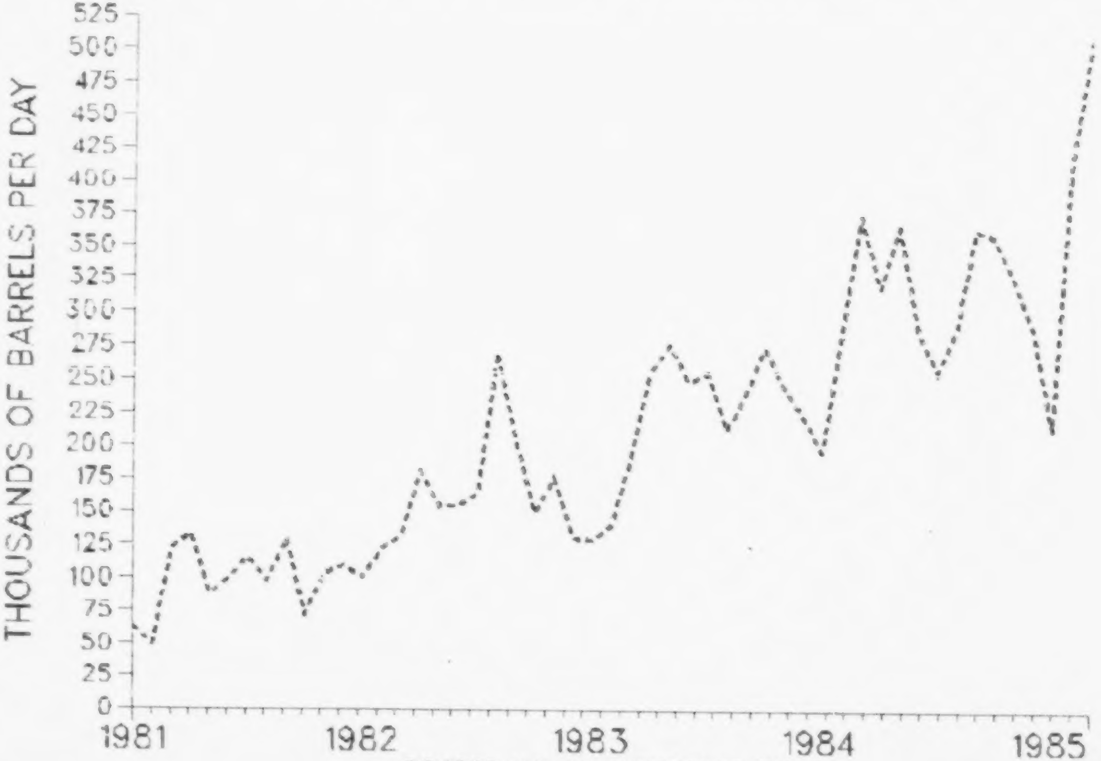
IBMIRD

CHART 1

U. S. GASOLINE IMPORTS

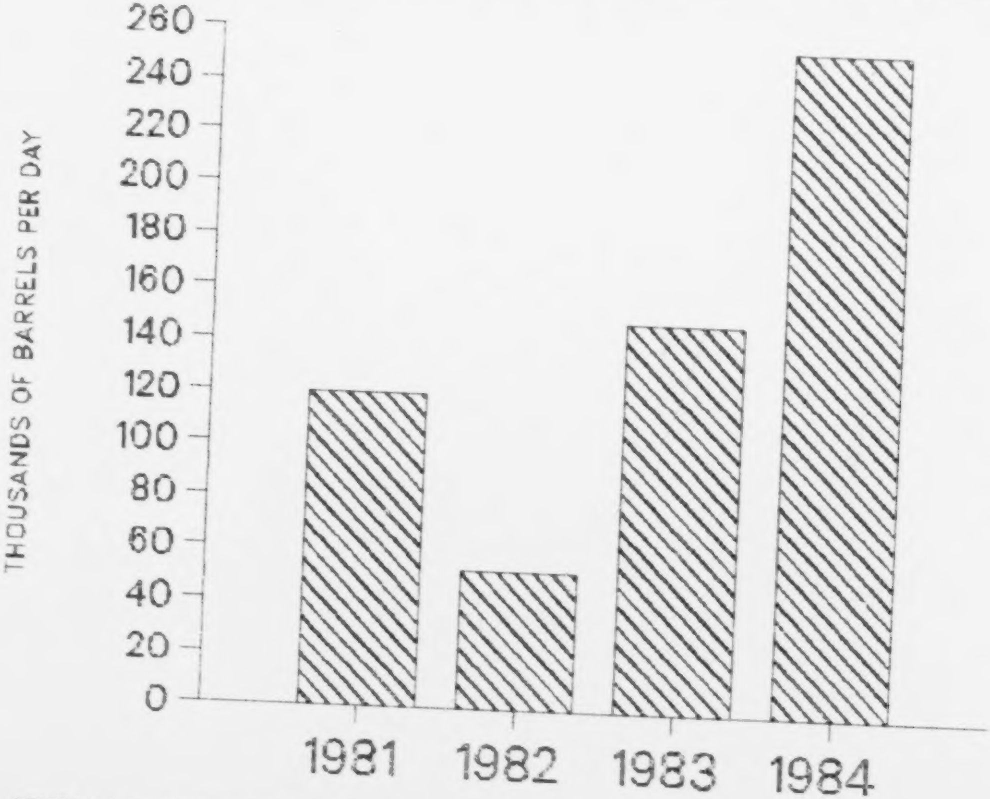
EXCLUDES SHIPMENTS FROM P.R. & V.I.



SOURCE: U.S. DEPARTMENT OF ENERGY

CHART 2

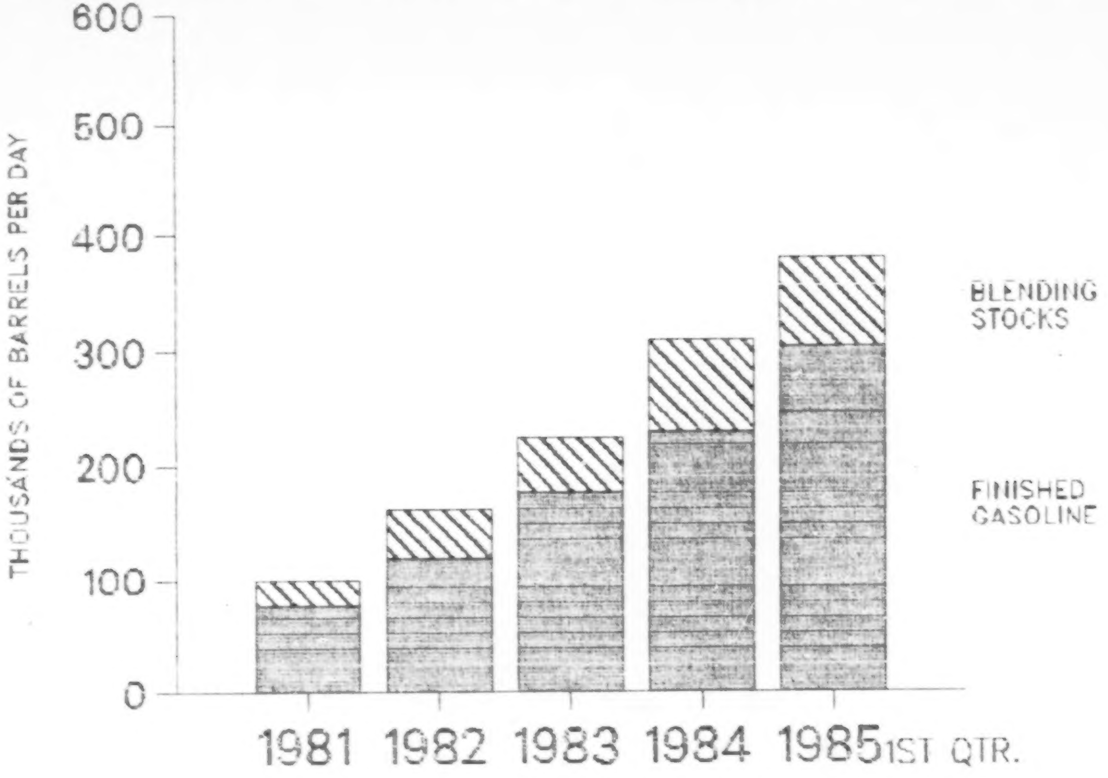
U.S. IMPORTS OF MIDDLE DISTILLATES*



*EXCLUDES SHIPMENTS FROM PUERTO RICO & VIRGIN ISLANDS

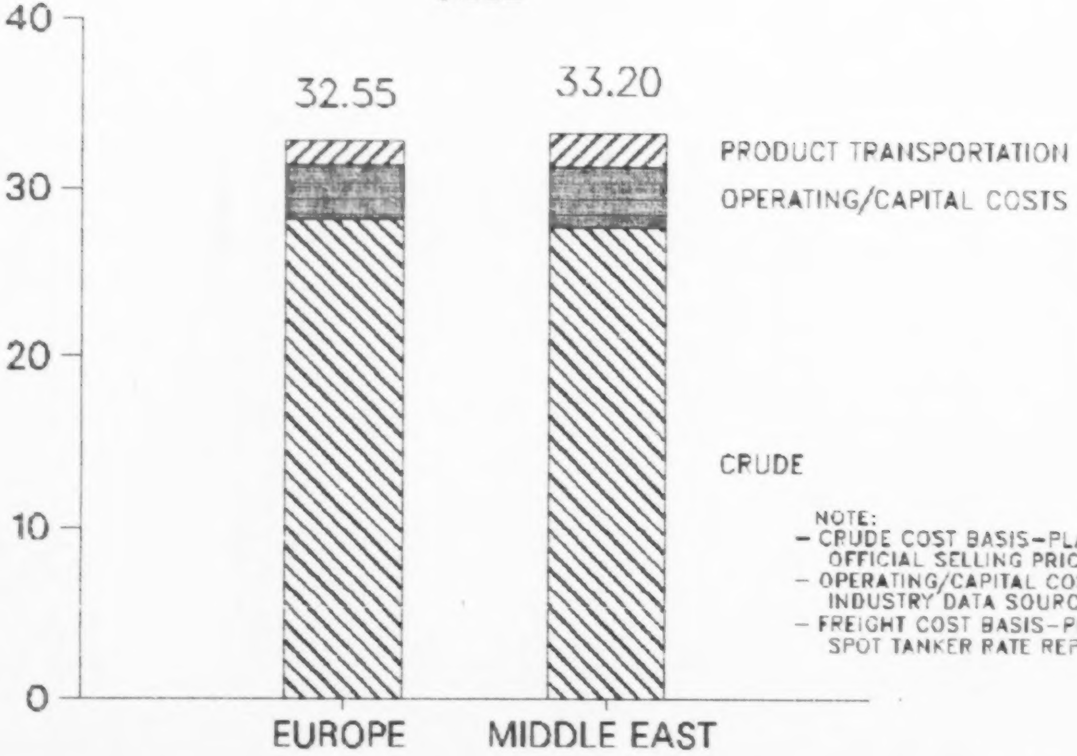
CHART 3

U.S. IMPORTS OF FINISHED GASOLINE AND BLENDING STOCKS*



*EXCLUDES SHIPMENTS FROM PUERTO RICO & VIRGIN ISLANDS

CHART 4

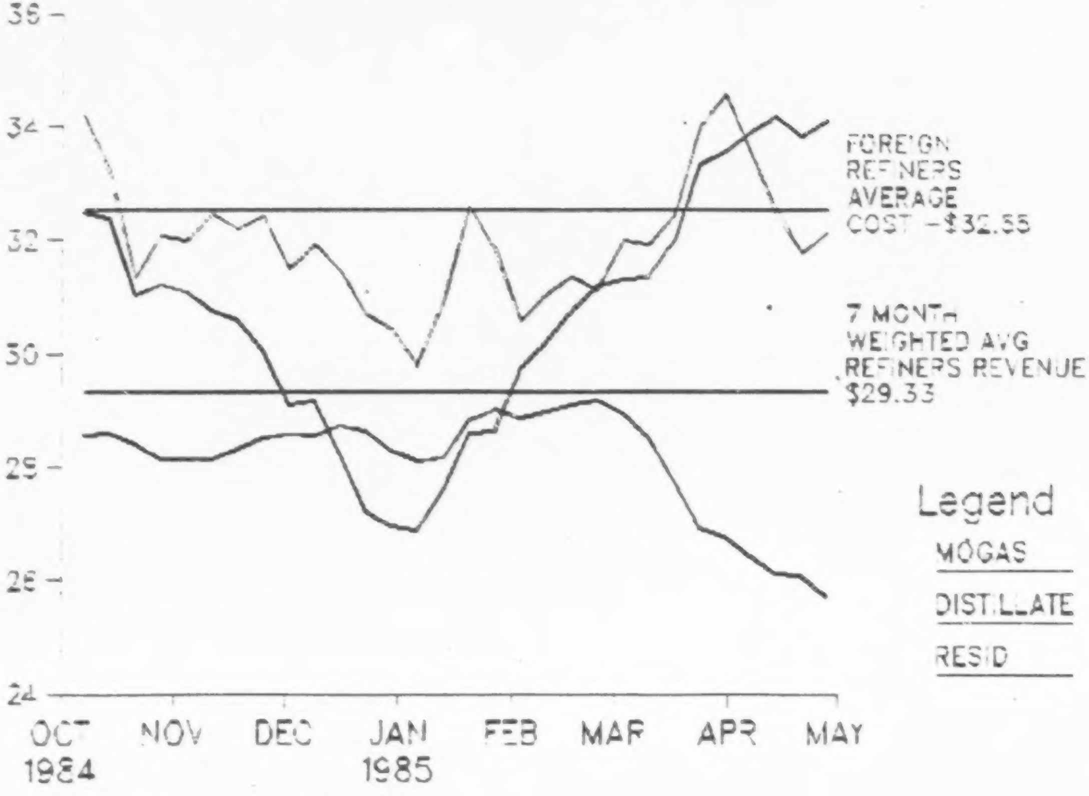


ESTIMATED
EXPORT REFINERY
PRODUCT SALES COST
$/BBL

NOTE:
- CRUDE COST BASIS–PLATT'S OFFICIAL SELLING PRICE POSTINGS
- OPERATING/CAPITAL COSTS BASIS–INDUSTRY DATA SOURCES
- FREIGHT COST BASIS–PLATT'S SPOT TANKER RATE REPORT

CHART 5

U.S. EAST COAST
PLATT'S HIGH SPOT IMPORT PRODUCT SALES PRICE VS. FOREIGN REFINER'S COST



SOURCE: Platt's/American Petroleum Institute

CHART 6

MAJOR EXPORT REFINERY PROJECTS

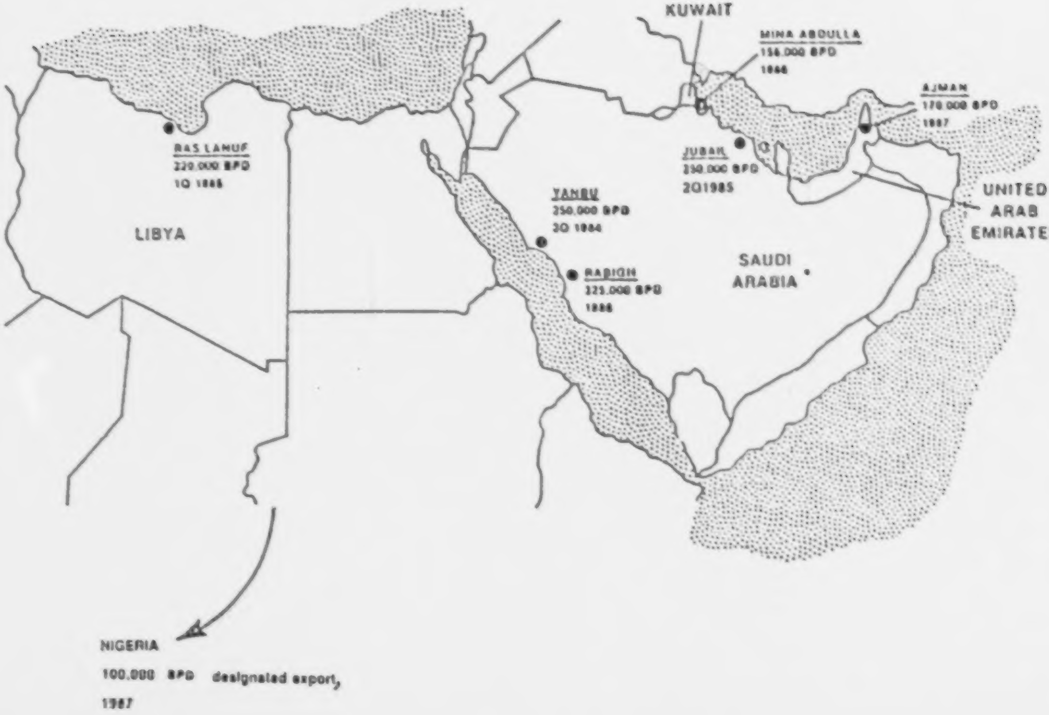

KUWAIT
MINA ABDULLA
156.000 BPD
1986
AJMAN
170.000 BPD
1987
JUBAIL
250.000 BPD
2Q1985
YANBU
250.000 BPD
3Q 1984
RABIGH
325.000 BPD
1986
UNITED ARAB EMIRATES
SAUDI ARABIA
RAS LANUF
220.000 BPD
1Q 1986
LIBYA
NIGERIA
100.000 BPD designated export,
1987

CHART 7

U.S. GASOLINE IMPORTS: TOP FIVE SUPPLYING COUNTRIES

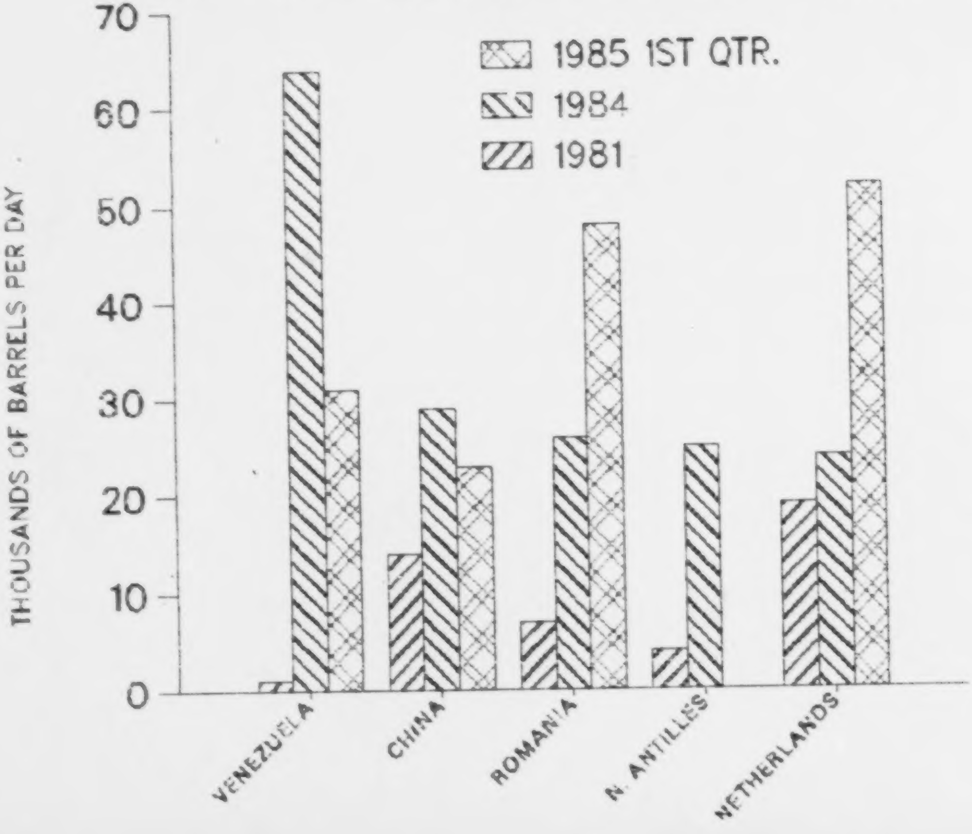


CHART 8

PIW®   MAY 6, 1985

ALL SIX OF LARGEST US OIL FIRMS REPORT LOWER FIRST-QUARTER PROFITS

US oil company earnings declined across the board in first quarter 1985, but gloomy results were tempered by a better showing in March. The profits picture for six major US oil firms suffered by comparison with a year earlier, when economic growth was taking hold and a colder winter improved product sales. Profits were undermined by continued price uncertainty and slowing economic growth, while the strong dollar put pressure on overseas refining and marketing margins (PIW Feb.11,p.7).

First-quarter comparisons with year earlier results are obscured for Chevron, Mobil and Texaco because of mergers and acquisitions, since the companies didn't restate 1984 figures (see footnote to table).

Amoco had a 20% drop, while Texaco had a small 0.3% decline thanks to its $114-million gain from sale of some Texaco Canada shares. Exxon's 10.2% net income falloff stems primarily from a poor refining and marketing performance as well as a 34% drop in chemical earnings. Exxon, Amoco and Arco attribute their earning declines in part to stock repurchase programs.

Profits for first quarter 1985 follow in million dollars with percent changes from year earlier. Oil volumes are in 1,000 b/d and gas in million cf/d.

	EXXON		*MOBIL		*CHEVRON		*TEXACO		ARCO		AMOCO	
Oil & Gas	1Q'85	% Chg	1Q'85	% Chg	1Q'85	% Chg	1Q'85	% Chg	1Q'85	% Chg	1Q'85	% Chg
Exploration & Production												
United States	566	+2.7	201	-2.9	270	+44.4	418	-16.7	339	+9.4	243	-15.6
Foreign	772	+5.8	331	+58.4	183	-0.5					189	+19.9
Refining & Marketing												
United States	13	-78.7	(11)	. . .	†(25)	. . .	(27)	. . .	35	+16.7	2	-90.9
Foreign	16	-86.2	(3)	. . .	†78	+151.6						
Transportation	(12)	. . .	. . .	. . .	. . .	. . .	(14)	. . .	92	-13.2		
Total Petroleum	1,355	-5.6	518	+2.8	506	+41.7	377	-10.2	466	-8.6	434	-20.5
Chemicals	80	-33.9	(7)	. . .	20	+185.7	(7)	. . .	15	-11.8	49	-16.9
Other	(110)	. . .	(191)	. . .	(172)	. . .	(50)	. . .	(129)	. . .	(10)	. . .
Total Profit	1,325	-10.2	320	-15.8	354	-6.3	320	-0.3	352	-10.9	473	-20.4
OPERATING STATISTICS*												
Crude Supply	2,095	-16.6	1,456	+8.3	1,502	+68.4	1,609	-7.0	723	+1.8	857	+1.9
Refinery Runs	3,093	-7.6	1,700	+6.4	2,081	+45.0	1,897	-5.9	744	+4.3	828	-8.7
Product Sales	4,245	-1.5	2,213	+6.1	2,653	+50.4	2,701	-0.7	922	+5.1	988	+4.9
Gas Sales	7,934	+7.7	4,842	+35.7	3,046	+100.9	3,592	+3.1	1,670	-0.5	3,301	+2.1
Profit per $ of Total Revenues	5.7¢	-3.1	2.1¢	-16.2	2.8¢	-46.2	2.7¢	-10.1	6.1¢	-8.5	6.8¢	-14.3
Petroleum Profits Per Bbl. of Product Sales	$3.55	-3.8	$2.60	-2.3	$2.12	-4.5	$1.98	-8.8	$5.82	-12.1	$4.88	-23.4

*Profit comparisons with first quarter 1984 don't include Mobil's earnings of Superior prior to July 1; Chevron's share of Gulf prior to May 1; and Texaco's Getty prior to March 1, 1984.

† Includes transportation.

Chart 9

EXAMPLES OF TARIFF MISCLASSIFICATION OF PETROLEUM PRODUCTS

The U.S. Government should take steps to ensure a more uniform application of product import duties and close loopholes which presently allow certain petroleum products to enter at rates well below those which the Congress intended. These products include naphthas, motor fuel blending stocks and gasoline "spiked" with up to 40% ethanol.

Naphtha

There have been cases where high octane gasoline blending stocks, e.g., catalytic or reformed naphtha have been imported under the unfinished oils or naphtha categories and dutied at 0.25c/gallon rather than at the gasoline tariff of 1.25c/gallon. This loophole has enabled refiners and gasoline blenders to import catalytic naphtha at the lower rate, blend it directly into gasoline, and thereby gain a competitive advantage over domestic refiners and others who import blending stocks at the higher gasoline tariff.

Since the present tariff schedule does not include a separate listing for these motor fuel blending stocks, there has been considerable uncertainty as to the classification of blendstocks for tariff purposes, and the duty has varied at the different ports of entry. This has been further complicated by Treasury Decision 83-173, which adopted updated ASTM Specifications for motor fuel and resulted in naphthas with a combined octane rating below 85 for unleaded and below 87 for leaded no longer being defined as motor fuels. Thus some customs officials assessed cargos of these blendstocks at the motor fuel tariff (1.25c/gallon) while others dutied them at the lower naphtha rate (.25c/gallon) and still others at a higher ad valorem rate.

Gasoline Ethanol Blends

It is believed that ethanol may be entering the United States hidden in gasoline blends from Brazil as it has recently increased its gasoline exports to the United States. However, Brazil is a net crude importer, so it is effectively importing crude and exporting products. Considering the current refining economics, it is not apparent how this operation can be profitable. We believe these gasoline exports may contain 25-40% ethanol. Importers can evade the ethanol import tariff of 60c/gallon plus 3% ad valorem by classifying the blend as naphtha or gasoline. When sold, the product can qualify for a gasohol excise tax waiver of 6c/gal.

Unfinished Oils

Unfinished oils are partially refined petroleum products that do not meet merchantable product specifications and will not be directly blended into merchantable products. Furthermore, unfinished oils should require further major processing to convert them to merchantable products. Effectively, this definition encompasses all feedstocks such as: Ethylene plant feedstocks, reformer feedstocks, FCCU feedstock, topped crude, etc. These type products that require major processing in a U.S. refinery are charged the crude oil tariff.

Because of lack of definition in the TSUS, some importers have been importing finished gasoline blending stocks that do not meet ASTM gasoline specifications as unfinished oil and paying the lower $0.105/bbl crude tariff. We believe that all gasoline blending stocks that are merely blended directly to motor gasoline without further major processing should be imported under the higher $0.525/bbl finished product tariff.

Senator **Nickles**. Thank you very much, Mr. Tell.

Mr. Stewart.

STATEMENT OF LEONARD P. STEUART II, PRESIDENT, STEUART PETROLEUM CO., ON BEHALF OF THE COALITION OF INDEPENDENT PETROLEUM PRODUCT MARKETERS

Mr. **Steuart**. Mr. Chairman, I appreciate the opportunity to appear before you and the panel today, members of the committee. My name is Leonard Steuart and I am chairman and chief executive officer of Steuart Petroleum Co., which is a Washington, D.C.-based importer and marketer of petroleum products. I am here today representing a coalition of independent marketers. That coalition is made up of the Independent Terminal Operators Association, the Independent Gasoline Marketers Association, the Society of Independent Gasoline Marketers of America, the New England Fuel Institute; and the Empire State——

Senator **Nickles**. Mr. Steuart, could you grab a microphone, please? Thank you.

Mr. **Steuart**. These associations represent independent retailers and wholesalers of motor gasoline and other petroleum products from coast to coast. The shared interest of the coalition's members derives from our operational independence. We compete with each other and directly with marketing and retailing operations of refiners.

Independent marketers have played a critical role in inducing price competition in the domestic market for refined products. In addition, independent marketers supply most of the product in the outlying and rural areas that are being abandoned by majors.

Our lack of crude oil production or processing capacity means that we must secure refined product supplies either from our domestic competitors or from imports. The price at which we can procure refined products is critical. Absent the availability of competitively-priced products, independent marketers would not survive.

We recognize that many independent refiners have had economic difficulty in the early 1980's. So, too, have many of the independent marketers. However, it is our firm conclusion that imports of refined products are not a significant cause of the U.S. refining industry's dislocation. The principal causes of refiners problems are the uneconomic expansion of refining capacity in the 1970's and the unresponsiveness until recently of crude oil prices to declining petroleum product prices.

Simply stated, refiners who call for restraints on imports seek higher product prices, thereby insulating petroleum products from market forces. In addition, as I will detail in a moment, refinery capacity in the United States, although declining, remains well in excess of economic or national security standards. Thus, refined product imports at current or anticipated levels do not pose any threat to U.S. national security.

I'd like to call the committee's attention to two issues that demonstrate there is no need for import barriers to protect the U.S. refining industry, and I'd like to draw your attention to the chart on the easel. What this depicts is total imports of petroleum products as it relates to total product demand.

And, as you can see, during the first quarter of 1985, which has been annualized, the three, four colors at the bottom are the imports. They are actually down marginally from 1984, and substantially down from the peak in 1973, but still not in excess of any one of the previous years going back to 1970.

The second issue I'd like to bring to your attention is the excess refining capacity, and this is operable refining capacity as it relates to imports. This chart is an API source chart. It only goes through January 1, 1984. We did not have the data for the year 1984, but it shows that the excess operable capacity still is substantially greater than historical. As a matter of fact, in the early years of the 1970's, the imports exceeded what our operable capacity was at that time.

The independent marketers obviously are opposed to any barriers. We feel that the imposition of tariffs or quotas on imports of crude oil or refined petroleum products is neither warranted nor wise. Import restraints would not address the principal cause of the dislocations now being experienced by the domestic refining industry. Restraints are not justified by economic or security considerations, yet restraints would have consequences threatening the competition in the petroleum industry as well as U.S. national security and economic growth.

For these reasons, the Coalition of Independent Marketers urges the rejection of protectionist legislation that would impose barriers to petroleum imports.

I thank you very much for the opportunity to appear before you.

[The prepared statement of Mr. Steuart follows:]

COALITION OF INDEPENDENT MARKETERS

TESTIMONY OF LEONARD P. STEUART, II
President
Steuart Petroleum Company

before the
UNITED STATES SENATE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION

Appearing on behalf of

EMPIRE STATE PETROLEUM ASSOCIATION
INDEPENDENT FUEL TERMINAL OPERATORS ASSOCIATION
INDEPENDENT GASOLINE MARKETERS' COUNCIL
NEW ENGLAND FUEL INSTITUTE
SOCIETY OF INDEPENDENT GASOLINE MARKETERS OF AMERICA

Washington, D.C.
June 4, 1985

My name is Leonard Steuart, I am President of Steuart Petroleum Company, an East Coast marketer and importer of refined petroleum products. I am also the Chairman of an _ad hoc_ coalition of independent marketers opposed to the imposition of barriers to imports of crude oil and refined petroleum products. In our view, such barriers would harm competition in the petroleum industry and would hinder economic growth; further they would not contribute to the health of the petroleum industry nor the preservation of U.S. national security.

I. INTRODUCTION AND SUMMARY

Our coalition is comprised of the Independent Fuel Terminal Operators Association ("IFTOA"), the Independent Gasoline Marketers Council ("IGMC"), the Society of Independent Gasoline Marketers of America ("SIGMA") the New England Fuel Institute ("NEFI") and the Empire State Petroleum Association ("ESPA").[1/] These associations represent independent retailers and wholesalers of motor gasoline and other refined petroleum products from coast to coast.

The shared interests of the Coalition's members derive from our operational independence. We compete with each other and directly with the wholesale and retail marketing operations of refiners. Indeed, our competitive impact on the marketplace has been beneficial in several ways. Independent

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[1/] A description of each of these associations is included as Attachment A.

marketers have introduced novel marketing devices such as self-service, high-volume/low-margin marketing and automated retail marketing. Because of these pioneering marketing concepts, as well as superior systems of cost controls, independent marketers have played a critical role in inducing price competition in the domestic market for refined products. In addition, independent marketers supply most of the product in the outlying and rural areas that are being abandoned by major refiners.

Our lack of crude oil production or processing capacity means that we must secure refined product supplies either from our domestic competitors or from imports. The price at which we can procure refined products is critical; absent the availability of competitively-priced products, independent marketers would not survive.

Imports of refined products serve important economic functions beyond mere addition to available supply. They provide independent marketers with a source of competitively priced refined products. Furthermore, the availability of refined product imports to the U.S. market induces competitive pricing by domestic refiners. For each of these reasons, the American economy benefits.

We recognize that many independent refiners have been experiencing economic difficulties; so, too, have many independent marketers. However, it is our firm conclusion that imports of refined products are not a significant cause of the U.S. refining industry's dislocations. The principal causes are (1) the uneconomic expansion of refining capacity in the 1970's brought about by (a) mistaken projections of increasing demand and (b) the subsidies provided by federal regulations; and (2) the unresponsiveness, until recently, of crude oil prices to declining petroleum product prices. Simply stated, refiners who call for restraints on imports seek higher product prices, thereby insulating petroleum products from market forces.

In addition, refinery capacity in the United States, although declining, remains well in excess of economic or national security needs. Thus, refined product imports at current or anticipated levels do not pose any threat to U.S. national security. Rather, the converse is true: restraints on imports of refined products would undermine national security.

II. IMPORTS ARE NOT THE CAUSE OF REFINERY CLOSINGS

Clearly some domestic refiners are experiencing economic difficulties; and many refineries have closed in recent years. (See Table 7). The source of these difficulties, however, is not the importation of refined petroleum products. Rather, these difficulties are the result of the struggle among refiners to retain market share in a market with lower consumption and reduced margins between the cost of crude oil and the selling price of petroleum products.

A. Imports of Petroleum Products Have Not Captured a Significant Share of the Market

U.S. imports of refined petroleum products are a very small factor in the domestic market. Import penetration remains slight despite the modest increase in refined products imports in 1984. As shown in Table 1, the sole refined product import category that reflects any meaningful increase is motor gasoline. Imports of distillate fuel oil and residual fuel oil remain well below historic peaks achieved during the 1970s, and residual fuel oil imports actually have declined substantially since 1980. The sole potential cause of complaint is motor gasoline imports.

U.S. imports of motor gasoline, however, have not captured a significant portion of the domestic market. Table 4 sets forth U.S. imports, apparent domestic consumption, and import penetration rates since 1973 for motor gasoline. As indicated, U.S. imports of motor gasoline did not increase substantially until 1983, when they rose from 46.1 to 77.5 million barrels. However, that increase did not result in the capture of a major portion of the U.S. motor gasoline market; import penetration reached only 3.22 percent in 1983, and stood at 4.13 percent in 1984. Even when imports of motor gasoline and blending components used in the production of motor gasoline are combined, import penetration in 1984 reached only 5.6 percent. See Table 5. More recent data dispel any trend toward further increases; imports in the first quarter of 1985 were 8.9 percent lower than in the corresponding period for 1984. In short, U.S. refiners remain in command of the vast bulk of the domestic motor gasoline market.

B. Refinery Closings are the Result of Declining Petroleum Product Demand and the End of Government Subsidies

In any case, the modest increase in gasoline imports occurred well after the refining industry started to decline from its peak levels of performance. Domestic refiners began to experience dislocations as early as 1979, when consumption began to fall. As shown in Table 4, gasoline consumption grew steadily throughout the 1970s to a peak in 1978, after which it declined until 1982 and then rebounded in 1983 and 1984. Despite this decline, demand remains at levels achieved during the early 1970s.

Other indicia of economic performance followed closely these declining trends in consumption. As shown in Table 10, for example, prices for regular motor gasoline and No. 2 home heating oil increased steadily until 1981, and then declined in 1982 and 1983. Similar to the consumption trends, however, price levels remained higher then those attained prior to 1980. In addition, refiners' net income increased steadily throughout the 1970s, peaked in 1980 and declined dramatically from 1980 to 1982.2/

2/ See API, Financial Trends of Leading U.S. Oil Companies, 1968-1983 (October 1984).

The lack of time correlation between the problems of U.S. refiners and the more recent increase in imports of motor gasoline demonstrates that there is no causal link between the two. Imports could not be a significant factor because they remained negligible until well after dislocations began. Accordingly, other factors must be the cause of such dislocations.

We believe that problems experienced by some domestic refiners since 1980 can be attributed almost exclusively to two underlying changes in circumstances: (1) the elimination of government price and allocation controls on crude oil and refined petroleum products in January 1981; and (2) the dramatic decline in demand for motor gasoline. These fundamental changes have: (a) accelerated the elimination from the marketplace of unnecessary and inefficient refining capacity; and (b) stimulated a competitive struggle between domestic refiners for market share during a period of declining demand.

From the fall of 1974 through the end of 1980, domestic refiners participated in the old oil entitlements and price control programs.3/ The entitlements program extended preferential allocations of crude oil to smaller and generally less efficient refiners. At the same time, government controls on the price of domestically produced crude oil and motor gasoline

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3/ See 10 C.F.R. Section 211.67.

were established at levels that permitted domestic refiners to enjoy substantial profits. The price control program also provided a disincentive to refined products imports because domestic price levels were generally below world market levels.

The economic distortions and subsidies from these regulations, and the general anticipation of substantial increases in demand, contributed to an unwarranted expansion of U.S. refining capacity. Existing but inefficient refineries were maintained or expanded, while a substantial number of small, comparatively inefficient refineries were constructed.

Since the elimination of these regulatory programs in 1981, U.S. refining capacity has returned to levels attained during the early to mid 1970s. See Table 6. Refinery closings generally reflected management's assessment that operations were no longer economically viable. However, the loss of viability was not the result of import penetration; rather, it reflected the intense competition among efficient domestic competitiors to maintain or expand market share in the wake of a decline in demand.

As a result of declining demand, most domestic refiners have been forced to face the reality of either operating at a lower utilization rate or increasing their market share by intense competition to insure continued operations at high levels of utilization. Those refineries unable to adjust have been closed.

C. Independent Refiners Have Been Hurt By the Narrow and Negative Margins Between The Cost of Crude Oil and the Price of Petroleum Products.

The competition for market share has also depressed the price of refined products. Indeed, in many instances this intense competition among integrated oil companies has driven the value of a barrel of finished petroleum products below the level representing the official posted price of crude oil plus necessary transportation and processing costs. In effect, refined products, adjusted for transportation and processing, are often selling at negative margins. Clearly, this economic inversion is not the result of gasoline imports ranging from 3-5 percent of domestic consumption.

This stark reality has generated different problems for the two distinct classes of domestic refiners. For independent refiners, the cost-price squeeze has generated an actual loss because the price of crude oil purchased from third parties represents a real cost to those refiners. For integrated companies, the situation is quite different. The cost of crude petroleum is merely the transfer price between two arms of the same integrated company. Although total profits may be reduced in a weak market, any losses incurred in refining or marketing can be offset by profits earned at the crude production stage.

The failure of crude oil prices to respond promptly and sufficiently to the downturn in refined products demand and price has resulted in a dangerous cost-price squeeze for independent refiners. The sometimes irrational relationship between the value of finished petroleum products and the "cost" of crude oil, which cannot be overcome by refining efficiencies, is perhaps the greatest threat to those firms.

It should be noted that recent trends provide hope that the plight of independent refiners may be alleviated. Crude oil prices have declined considerably in the past year, exhibiting a delayed response to the depressed levels of product prices. Moreover, wholesale motor gasoline prices have been rising steadily since January.4/ Whether these signs are short-term phenomena or a harbinger of an improvement in market conditions, they clearly demonstrate that the market will adjust inevitably to supply/demand realities.

In sum, dislocations in the U.S. refining industry are attributable to a rapid expansion in refining capacity, declining demand for refined products, and the failure of crude petroleum markets to respond promptly to falling refined product prices. These three factors have accentuated the historical competitive disadvantage of U.S. independent refiners: their lack of crude petroleum production, a factor that allows integrated refiners to remain profitable in weak markets.

4/ See EIA Weekly Petroleum Status Report, pp. 18-20, May 17, 1985.

Accordingly, there is no basis to conclude that imports of refined petroleum products constitute a significant factor in the problems the domestic refining industry is now facing. Moreover, there is no reason to believe that broad-based action to protect domestic independent refiners from import competition would significantly enhance their economic position. So long as crude oil prices are effectively at higher levels than finished product prices, the independent refiners' position will remain precarious. If imports of finished products are controlled, or made uneconomic, all domestic product prices would rise, but the price of crude oil would also move higher. Thus, over time, the relative values of the crude oil and finished products would remain fairly constant, only at higher levels for all American consumers.

III. REFINING CAPACITY REMAINS MORE THAN ADEQUATE

Despite refinery closings the U.S. has, since 1980, enjoyed substantial excess refinery capacity. See Table 1. Although U.S. refinery capacity throughout the 1970s fell short of the domestic demand for petroleum products, reductions in demand since that time have outpaced elimination of refining capacity. From 1979 to 1984, reductions in operable refining capacity totalled 1.3 million barrels per day. Yet, during this same period, the decline in product demand exceeded 2.8 million barrels per day. Accordingly, even in 1984, the U.S. maintained operable refining capacity of more than 400,000 barrels per day in excess of its total demand for refined products. See Table 2.

This excess refinery capacity provides additional security against any possible disruptions of product imports. In every year since 1979, U.S. excess or unused refining capacity has been far above the level of product imports. In 1984, the U.S. refining industry maintained excess capacity of more than 4 million barrels per day. This exceeded total product imports by more than 2 million barrels per day. See Table 1. Thus, even if all petroleum product imports were cut-off, which is highly unlikely, the U.S. could refine the volume of products imported and still have more than 2 million barrels per day of excess refinery capacity. Under these circumstances, it is difficult to understand how U.S. economic or national security is being threatened by the drop in refinery capacity that occurred in the early 1980s.

There have been similar reductions in total operational refining capacity in other countries. Since 1979, most of the industrial democracies, including France, Italy, Germany and Japan have experienced major cut-backs. Worldwide, we believe that the reductions in capacity from 1980-1985 exceed the additions in both producing and consuming nations. Therefore, additions to refining capacity in such nations as Saudi Arabia should not be viewed as net additions; rather, this new capacity must be measured against the elimination of substantial uneconomic refinery capability in many producing and consuming nations.

Finally, the potential additions to capacity from refineries not yet built cannot be the basis for imposition of import restrictions and do not pose any immediate threat to U.S. refiners. It is speculative to predict (1) how much additional capacity will be built in OPEC nations, (2) when such capacity could be brought on line, and (3) whether any of the refined products will be exported to the U.S. If history is any guide, much of the planned increases in refinery capacity will never be constructed, and much of it may only replace capacity that has been destroyed in the Iran/Iraq war.

Even if new OPEC capacity is brought on line, it is not likely that U.S. markets will receive the major volume portions of the products refined. A recent study conducted for the Department of Energy by the East-West Center, "The Changing Structure of World Refining Industry: Implications for U.S. Energy Security," concludes that "the U.S. market is not the most economical market for [Persian] Gulf exporters," and that large product exports to the U.S. will occur only if other consuming nations place barriers on product imports. See p. 53. Accordingly, the U.S. should focus its efforts on preventing other nations from imposing barriers to import of petroleum products, rather than imposing barriers of its own.

IV. ADVERSE CONSEQUENCES OF RESTRICTIONS ON REFINED PRODUCT IMPORTS

The imposition of tariffs and/or quotas on U.S. imports of crude oil or refined petroleum products would have severe adverse consequences on competition in the petroleum industry, on the domestic economy as a whole, and on U.S. foreign policy.

As set forth above, current conditions in the U.S. petroleum industry may be more a product of market forces than at any time in recent history. Deregulation has allowed the market to determine the appropriate demand level and price for refined products in the United States.

Import restrictions would be another form of control over the now deregulated market. A return to a controlled market would distort market forces and have adverse consequences throughout the U.S. economy. The immediate impact, of course, would be to raise product prices for consumers and consuming industries. The long-term consequences, however, could be even more severe.

As we have indicated, the unrestricted availability of imports is the principal competitive tool of the independent marketer, who has neither crude oil production nor refining capability. Product import restrictions, whether volumetric or monetary, impose substantial barriers to the ability of any independent marketer to compete with refiners. In many areas, these barriers could drive the independent marketer out of the market entirely.

Without availability of imported product, marketers must rely entirely on domestic refiners, whose economic interest is to increase the wholesale price of refined products. Even worse, in many instances it is in the interest of domestic refiners to reduce or eliminate sales to independent marketers. It should be noted that in the spring of 1973 -- before the Arab Oil Embargo -- the availability of imported petroleum products dropped sharply; as a result, the supplies available to independent marketers were sharply restricted by domestic refiners. This led the Federal Government to impose the voluntary petroleum allocation program in May, 1973 and the Senate to pass the Emergency Petroleum Allocation Act in June, 1973. Based upon the bitter experience of the past, we are certain that product import restrictions will encourage refiners to curtail sales to independent marketers, making it far more difficult for us to secure economically priced products; this will be followed by strong pressures for a new mandatory allocation program.

Import quotas or tariffs will also unquestionably harm the national economy, because of the pervasive use of petroleum products by all sectors of commerce and industry. Petroleum products represent one of the largest elements of the Consumer Price Index.5/ Accordingly, a ten percent increase in

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5/ Energy prices directly represent approximately 11.5 percent of the Consumer Price Index, and account for 32 percent of the producer price index for crude materials,

[Footnote continued]

the cost of petroleum products (approximately $3 per barrel) would produce an inflationary surge through the entire economy as well as a considerable increase in unemployment. The steady-state effect of a ten percent increase in the price of petroleum products would increase the GNP deflator by about 0.5 percent, decrease real GNP by approximately 0.5-0.7 percent, and increase unemployment by about 0.2 percent. Clearly, a substantial increase in the price of petroleum imports will promptly raise the price of all domestic petroleum products, all competing energy sources, and indeed all goods and services.

Studies of the economic impact of tariffs or fees on imports of crude petroleum illustrate the macroeconomic effect of tariffs and/or quotas on imports of refined petroleum products. An analysis performed by the Petroleum Industry Research Foundation6/ in April 1982 projected that an import fee of $5.00 per barrel would generate an increased cost of $29 billion to oil consumers in its first full year as well as an increase in the inflation rate of approximately 1.3 percentage points. Similarly, an April 1982 study by the Congressional Budget Office7/ estimated that a $5.00 per barrel tariff would

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[Continued from previous page]

- 15 percent of the producer price index for semi-finished goods, and 12 percent of the producer price index for finished goods.

6/ Petroleum Industry Research Foundation, Inc.: The Oil Import Fee Issue, April 1982.

7/ CBO, Oil Import Tariffs: Alternative Scenarios and Their Effects, Staff Working Paper (April 1982).

increase the consumer price index by between 0.8 and 1.0 percent, the unemployment rate by 0.1 to 0.2 percent (between 100,000 and 200,000 persons), and reduce constant dollar gross national product by between 0.5 and 0.7 percent. Although the Congressional Budget Office believed that these effects would diminish after time, the impact clearly would be significant.

An increase in petroleum product prices resulting from tariffs and/or quotas therefore would fuel inflationary trends that have only recently moderated. Moreover, increased prices could slow the recent growth enjoyed by the U.S. economy as a whole and further undermine the competitiveness of domestic industries vis-a-vis their foreign counterparts. All of these general economic ramifications counsel against the imposition of restraints on imports of crude oil or refined products.

Finally, a fee or quota on petroleum product imports would be contrary to U.S. foreign policy objectives, and ultimately would damage national security. The primary sources of U.S. imports of crude oil and refined petroleum products are allies of the United States. In 1984, for example, our major sources of crude oil and refined products imports were Brazil, Venezuela, the Netherlands, Mexico, the United Kingdom, China and Canada. These countries are U.S. allies, and are located in regions critical to U.S. national security; and excluding Venezuela, only 0.8 percent of all U.S. product imports were of

OPEC origin. Maintenance of amicable relations with these countries is important for political, economic and strategic reasons. The alienation of these countries through the imposition of restraints on imports of crude oil or refined petroleum products could provoke adverse political action as well as retaliatory trade actions against other sectors of our economy, such as agriculture. Such provocation would undermine our foreign policy and trade policies, and could seriously undermine our national security.

V. CONCLUSION

The imposition of tariffs and/or quotas on imports of crude oil or refined petroleum products is neither warranted nor wise. Import restraints would not address the principal cause of the dislocations now being experienced by the domestic refining industry. Restraints are not justified by economic or security considerations, yet restraints would have consequences threatening competition in the petroleum industry, as well as U.S. national security and economic growth. For these reasons, the Coalition of Independent Marketers urges the rejection of protectionist legislation that would impose barriers to petroleum imports.

Thank you very much.

ATTACHMENT A

COALITION OF INDEPENDENT MARKETERS

The Empire State Petroleum Association represents the independent gasoline distributors and home heating oil marketers of New York State.

The Independent Fuel Terminal Operators Association is comprised of 16 companies which own and control terminals capable of receiving ocean-going tankers. None is affiliated with a major integrated oil company. Members of the Association are independent marketers of No. 2 fuel oil, No. 6 fuel oil, gasoline and other petroleum products.

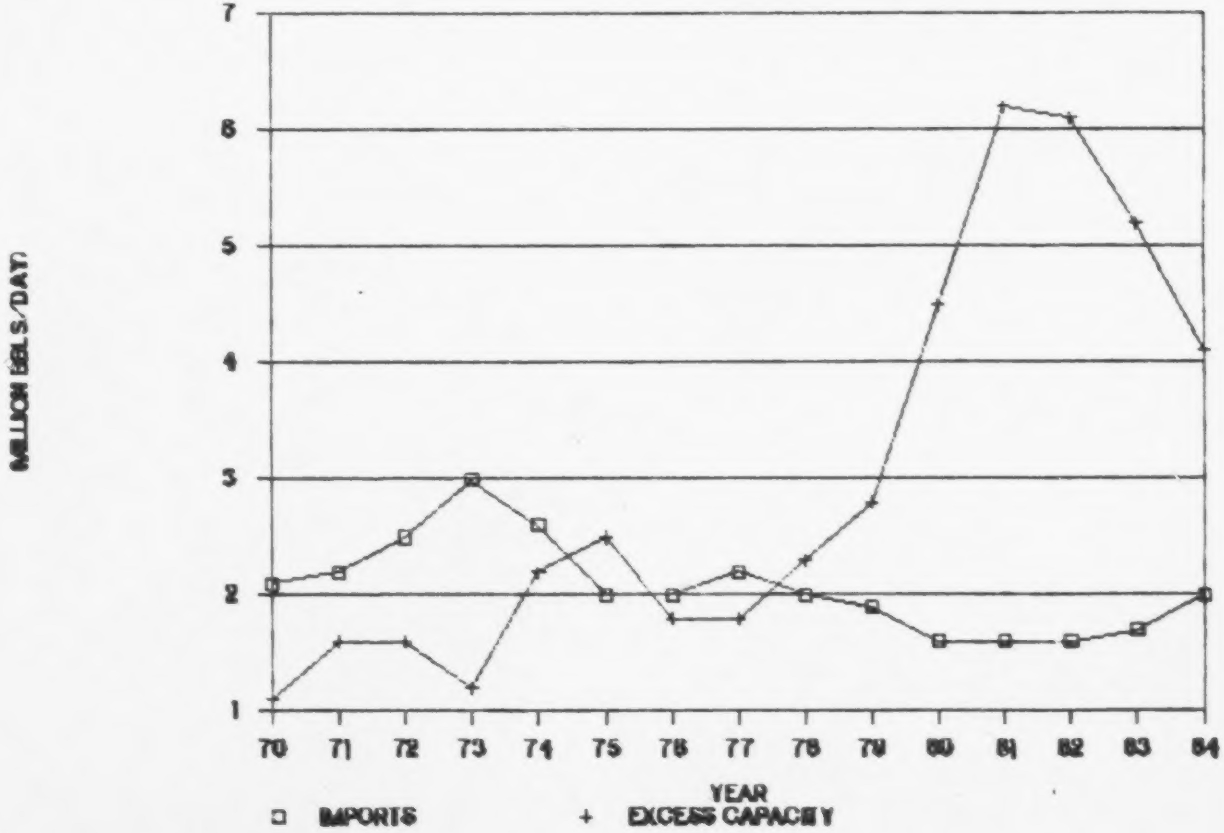
The Independent Gasoline Marketers' Council is a trade association of non-branded independent retailers of motor gasoline. Council members operate groups of retail stations under their own brand name and operate in 45 of the 50 states.

The New England Fuel Institute is an association of 1,132 independent retail and wholesale home heating oil distributors throughout the six New England states.

The Society of Independent Gasoline Marketers of America (SIGMA) is a trade association comprised of approximately 250 independent marketers and private brand chain retailers of motor fuels. SIGMA members operate in 49 of the 50 states through over 15,000 retail outlets and their sales represent between 10 and 15 percent of total retail sales of motor fuels in the United States.

CHART 1

EXCESS CAPACITY & PETRO IMPORTS

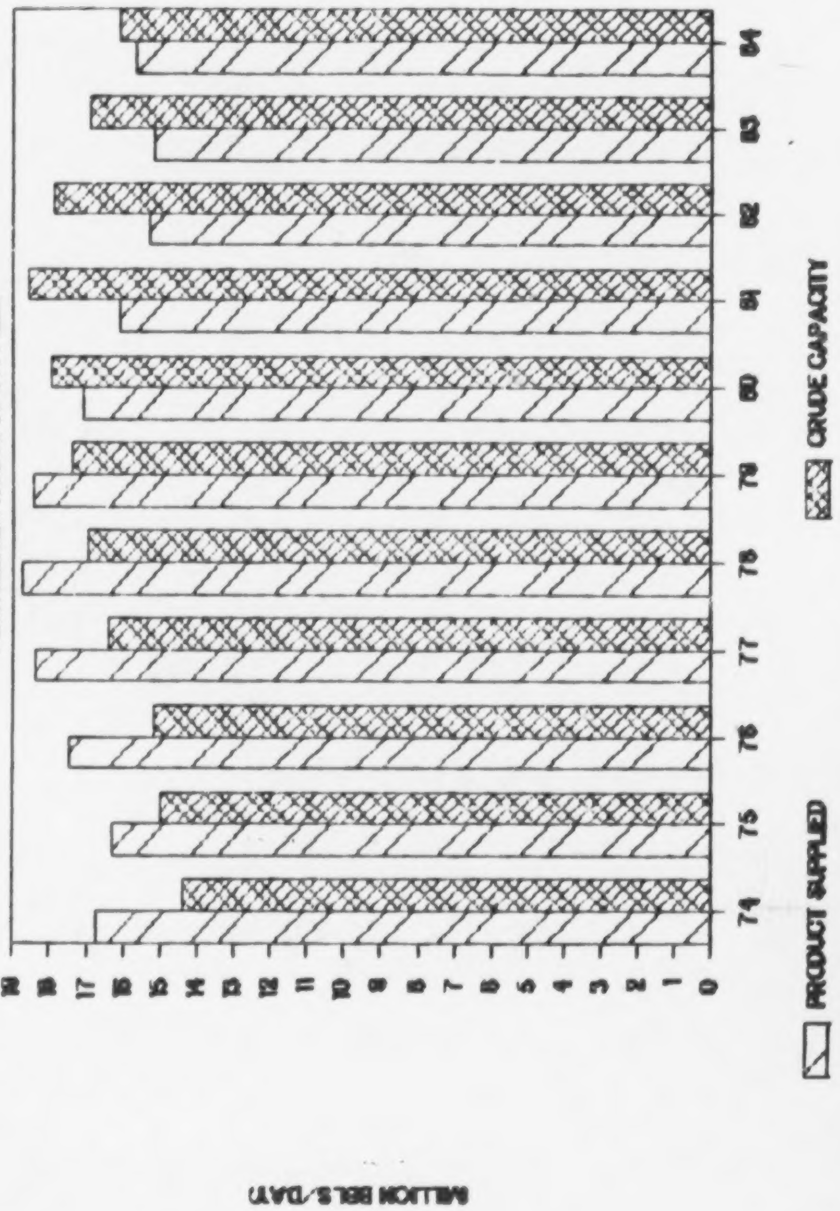


Source: See Table 1.

CHART 2

US REFINERY CAPACITY &

PETROLEUM PRODUCTS SUPPLIED

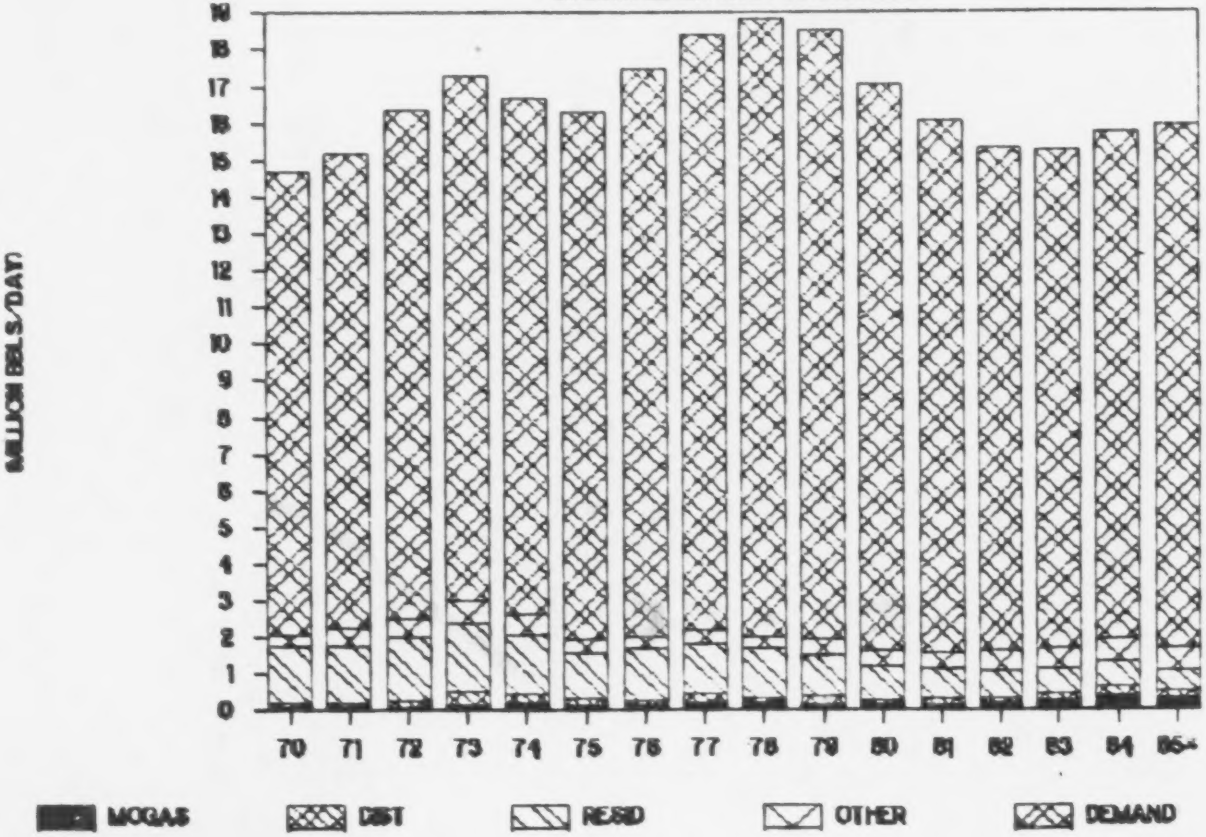


Source: See Table 2.

CHART 3

US IMPORTS-PETRO PRODUCTS

& PETROLEUM PRODUCT SUPPLIED



* First Quarter 1985.

Source: See Table 3.

TABLE 1

U.S. Excess Refining Capacity, and Petroleum Products Imports (Thousand barrels/day)

	Petroleum Products Imports	Excess Refining Capacity 1/
1970	2,095	1,151
1971	2,245	1,660
1972	2,532	1,596
1973	3,012	1,240
1974	2,635	2,229
1975	1,951	2,519
1976	2,026	1,821
1977	2,193	1,796
1978	2,008	2,308
1979	1,937	2,793
1980	1,646	4,507
1981	1,599	6,151
1982	1,625	6,116
1983	1,722	5,174
1984	1,979	4,082

1/ Excess Capacity = Operable Capacity - Crude Runs (Table 1a).

Note: Capacity data as of January 1.

Source: American Petroleum Institute, Basic Petroleum Data Book, Volume V, Number 2 (May, 1985) and Petroleum Supply Monthly (December, 1984).

TABLE Ia

Excess Refining Capacity
(Thousand barrels/day)

	Operable [*] Capacity	-	Crude Refinery Runs	=	Excess Capacity
1970	12,021		10,870		1,151
1971	12,860		11,200		1,660
1972	13,292		11,696		1,596
1973	13,671		12,431		1,240
1974	14,362		12,133		2,229
1975	14,961		12,442		2,519
1976	15,237		13,416		1,821
1977	16,398		14,602		1,796
1978	17,047		14,739		2,308
1979	17,441		14,648		2,793
1980	17,988		13,481		4,507
1981	18,621		12,470		6,151
1982	17,890		11,774		6,116
1983	16,859		11,685		5,174
1984	16,137		12,055		4,082

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[*] Includes operating capacity plus operable shutdown capacity; capacity data as of January 1.

Source: American Petroleum Institute, Basic Petroleum Data Book, Volume V, Number 2 (May, 1985) and Petroleum Supply Monthly (December, 1984).

TABLE 2

U.S. Refinery Capacity and Total Petroleum Products Supplied
(Thousand barrels per day)

	Petroleum Products Supplied	Crude Oil Distillation Capacity *
1974	16,652	14,362
1975	16,332	14,961
1976	17,461	15,237
1977	18,431	16,398
1978	18,847	17,047
1979	18,516	17,441
1980	17,056	17,988
1981	16,058	18,621
1982	15,296	17,890
1983	15,231	16,859
1984	15,708	16,137

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* Includes operating capacity plus operable shutdown capacity; capacity data as of January 1.

Source: American Petroleum Institute, Basic Petroleum Data Book, Volume V, Number 2 (May, 1985) and Petroleum Supply Monthly (December, 1984).

Table 3

U.S. Imports of Motor Gasoline, Distillate Fuel Oil and Residual Fuel Oil and Total Petroleum Product Supplied, 1970 - 1984
(1,000 barrels per day)

Year	Motor 1/ Gasoline	Distillate Fuel Oil	Residual Fuel Oil	Total Imports of Petroleum Products	Total Petroleum Products Supplied
1970	67	147	1,528	2,095	14,697
1971	59	153	1,583	2,245	15,213
1972	68	182	1,742	2,525	16,367
1973	134	392	1,853	3,012	17,308
1974	204	289	1,587	2,635	16,652
1975	184	155	1,223	1,951	16,322
1976	131	146	1,413	2,026	17,461
1977	217	250	1,359	2,193	18,431
1978	190	173	1,355	2,008	18,847
1979	181	193	1,151	1,937	18,516
1980	140	142	939	1,646	17,056
1981	181	173	800	1,599	16,058
1982	239	93	776	1,625	15,296
1983	294	174	699	1,722	15,231
1984	370	270	674	1,979	15,708
1985 2/ 1st Qtr.	317	193	585	1,700	15,900 3/

1/ Includes blending components.

2/ Quarterly average based on January and February monthly and March weekly statistics.

3/ Rounded.

Source: U.S. Dep't of Energy, Energy Information Administration, Annual Energy Review (1983); Petroleum Supply Monthly (Dec. 1984); Weekly Petroleum Status Report (May 23, 1985); American Petroleum Institute, Basic Petroleum Data Book, Volume V, Number 2 (May 1985).

TABLE 4

U.S. Motor Gasoline Production, Consumption, and Import Penetration 1973-1984

(1,000 barrels)

Year	Shipments 1/	Exports 2/	U.S. Imports 3/	Apparent U.S. Consumption	Import Penetration Ratio
1973	2,388,560	1,632	17,330	2,404,258	0.72%
1974	2,312,640	644	33,743	2,345,739	1.44
1975	2,369,580	152	22,740	2,392,168	0.95
1976	2,500,615	175	8,073	2,508,513	0.32
1977	2,540,765	265	23,005	2,563,505	0.90
1978	2,636,395	207	18,724	2,654,912	0.71
1979	2,501,710	153	23,411	2,524,968	0.93
1980	2,350,600	493	18,225	2,368,332	0.77
1981	2,348,045	697	32,485	2,379,833	1.36
1982	2,322,495	12,035	46,097	2,356,557	1.95
1983	2,330,525	4,162	77,491	2,403,854	3.22
1984	2,340,380	2,576	101,060	2,438,864	4.14

1/ Annualized from daily averages, adjusted for daily average stock withdrawals.

2/ Current exports are classified under Schedule B No. 475.2520. It is a compilation of three prior existing categories. From 1974 through 1977, exports were classified under Schedule B Nos. 332.1015 (aviation gasoline, transferred in whole to 475.2520) and 332.1030 (gasoline, not elsewhere classified, including natural gasoline, transferred in part to 475.2520). Prior to 1974, exports were classified under Schedule B Nos. 332.1010 (aviation gasoline, 100 octane and over), 332.1020 (aviation gasoline, less than 100 octane), and 332.1030. Statistics for 1973-77 are probably overstated.

3/ TSUS No. 475.2520.

Source: U.S. Dep't of Energy, Energy Information Administration, Petroleum Supply Annual (1983) and Petroleum Supply Monthly (Jan. 1985); U.S. Dep't of Commerce, Bureau of the Census.

TABLE 5

Finished Motor Gasoline and Motor Gasoline Blending Components 1/ U.S. Production, Consumption and Import Penetration

(1,000 barrels per day)

Year	Total Production	Imports 2/	Stock Withdrawal	Refinery Inputs 4/	Exports	Apparent U.S. 5/ 6/ Consumption	Import Penetration Ratio
1979	6,852	181	2	NA	0	7,035	2.6%
1980	6,506	140	-66	NA	1	6,579	2.1%
1981	6,405	181	28 3/	156	2	6,456	2.8%
1982	6,338	239	49	172	20	6,434	3.7%
1983	6,340	294	58 3/	134	10	6,548	4.5%
1984	6,466	370	-57	120	6	6,653	5.6%

1/ Motor gasoline blending components as reported by DOE.

2/ Imports based on DOE statistics, which vary from Dept. of Commerce statistics due to different reporting methods.

3/ In January 1981 and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations.

4/ Refinery input of motor gasoline blending components equal refinery input minus refinery output; Refinery inputs of finished motor gasoline are reported by DOE on a net basis under refinery production.

5/ Totals may not equal sum of components due to independent rounding.

6/ Beginning in 1981, apparent consumption is probably understated, and consequently ratios overstated, due to negative product supplied balances of motor gasoline blending components. According to DOE, negative balances may occur for a number of reasons. A primary cause for blending components is that they have entered the primary supply channels with their production net having been reported.

Source: U.S. Dep't of Energy, Energy Information Administration, Petroleum Supply Monthly (Jan. 1983 - Dec. 1984).

N.A. = Not available.

TABLE 6

U.S. Crude Petroleum Refining Capacity, Refinery Runs, and Capacity Utilization
1973-1984

(1,000 barrels per day)

Year	Capacity 1/	Refinery Runs	Utilization
1973	13,671	12,431	90.9%
1974	14,362	12,133	84.5
1975	14,961	12,442	83.2
1976	15,237	13,416	88.0
1977	16,398	14,602	89.0
1978	17,047	14,739	86.5
1979	17,441	14,648	84.0
1980	17,988	13,481	75.0
1981	18,621	12,470	67.0
1982	17,890	11,774	65.8
1983	16,859	11,685	69.3
1984	16,137	12,055	74.7

1/ Capacity as of January 1; Includes operating capacity plus operable shutdown capacity.

Source: American Petroleum Institute, *Basic Petroleum Data Book*, Vol. V, No. 2 (May 1985); U.S. Dep't of Energy, Energy Information Administration, Petroleum Supply Monthly (Dec. 1984).

TABLE 7

U.S. Refineries, 1973-1984

Year	Operating	Shutdown 1/	Total
1973	253	28	281
1974	257	27	284
1975	262	28	290
1976	265	22	287
1977	273	18	291
1978	290	12	302
1979	301	10	311
1980	311	8	319
1981	315	9	324
1982	254	47	301
1983	233	25	258
1984	214	33	247

1/ Prior to 1980, included refineries capable of operation and inoperable facilities needing extensive reconditioning. From 1980 to 1984, included only operable shutdown.

Source: American Petroleum Institute, Basic Petroleum Data Book, Vol. V, No. 1 (Jan. 1985).

TABLE 8

U.S. Crude Oil Imports 1/
1973 - 1984
(1,000 barrels per day)

1973	3,244
1974	3,477
1975	4,105
1976	5,287
1977	6,615
1978	6,356
1979	6,519
1980	5,263
1981	4,396
1982	3,488
1983	3,329
1984	3,402

1/ Includes crude oil for storage in the Strategic Petroleum Reserve.

Source: U.S. Dep't of Energy, Energy Information Administration, Petroleum Supply Monthy (Dec. 1984).

TABLE 9

U.S. Imports of Gasoline, By Country, 1980-1984 (in barrels)

Country of Exportation	1980	1981	1982	1983	1984
Brazil	—	—	3,868,192	7,590,276	12,553,873
Canada	3,436,964	3,779,825	3,536,791	7,536,968	9,409,936
Indonesia	1,810,598	68,643 *	----	—	—
Italy	1,152,870	3,112,822	1,643,324	3,070,897	6,556,372
Netherlands	590,823	6,092,091	11,374,829	15,380,505	14,699,948
Neth. Antilles	1,007,673	2,689,661	3,571,413	4,974,005	3,672,629
PRC	2,558,675	6,766,684	9,558,862	10,371,483	10,453,208
Trinidad	5,388,588	3,257,604	3,129,886	2,155,750	697,464
Venezuela	—	—	1,388,306	11,667,668	22,416,610
Other	2,778,967	6,717,978	8,025,209	14,743,422	20,599,659
TOTAL	**18,725,158**	**32,485,308**	**46,096,812**	**77,490,974**	**101,059,699**

* Foreign Trade Zone non-privileged status.

Source: U.S. Dep't. of Commerce, Bureau of the Census.

TABLE 10

Comparison of U.S. Refiner Crude Petroleum Acquisition Cost and Refined Products Prices, 1973-1983

(In U.S. $)

Year	Refiner Acquisition Cost 1/		Refined Products Prices 2/	
	Domestic	Imported	Regular Gasoline 3/	No. 2 Heating Oil 4/
1973	$ 4.17	$ 4.08	$ .3882	$ .2275
1974	7.18	12.52	.5241	.3601
1975	8.39	13.93	.5722	.3898
1976	8.84	13.48	.5947	.4180
1977	9.55	14.53	.6307	.4737
1978	10.61	14.57	.6571	.5080 est.
1979	14.27	21.67	.8779	.7280
1980	24.23	33.89	1.2172	1.0097
1981	34.33	37.05	1.3110	1.2466
1982	31.22	33.55	1.2220	1.2086
1983	28.87	29.30	1.1570	1.1012

1/ Expressed in U.S. dollars per barrel.

2/ Expressed in U.S. dollars per gallon.

3/ Service Station price, including taxes.

4/ Including taxes, price for 1978 estimated.

Source: American Petroleum Institute, Basic Petroleum Data Book, Vo. V, No. 1 (Jan. 1985) (compiled from various sources).

Senator NICKLES. Thank you very much for your comments. Mr. HALL.

STATEMENT OF JOHN R. HALL, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, ASHLAND OIL, INC., ON BEHALF OF THE INDEPENDENT REFINERS COALITION

Mr. HALL. My name is John Hall. I'm the chairman and chief executive officer of Ashland Oil. Today I'm representing my own company and the other members of the Independent Refiners Coalition. A list of the names of the members of our coalition is attached to my testimony.

Mr. Chairman, as we have already discussed, since 1981, 140 refineries have been closed, resulting in a loss of 20,000 jobs, representing about 4 million barrels a day of capacity, or about 25 percent of the total.

Now we'll acknowledge that some of these refineries were inefficient refineries that were children of the entitlements program and should have been closed. However, 39 refineries with capacities in excess of 50,000 barrels a day have been closed and as a result the current operating capacity in the United States, according to our figures, is 14 million barrels a day.

We think it's important in analyzing capacity figures to differentiate between operating and operable capacity. Mr. Boggs has testified this morning that close to 16 million barrels a day is the operable capacity. But that includes plants that have been mothballed. It is our position that the 14 million barrel number is much more important because a mothballed refinery can take 3 to 6 months to restart, and after it's been shutdown for 2 years it may not be possible to start it again at all.

Mothballed refineries can probably not be of any help to us in the event of supply disruption. As we have discussed, the industry was forced to rationalize in the early 1980's by declining demand. However, the industry now faces a new threat which is forcing further shutdown. That new threat is imports of gasoline and gasoline blend stock, which has tripled from 168,000 barrels a day in 1981 to 480,000 barrels a day in 1984.

The majority of these imports are subsidized, coming primarily from foreign government-owned refineries. In most cases, these refineries are subsidized with benefits including below-market-price crude oil, low-cost natural gas for fuel, low interest loans and tax holidays.

Over 60 percent of all the refineries outside the United States are owned by foreign governments. In the free market, these foreign refineries cannot compete against U.S. refineries. We have spent $12 billion since 1981 to modernize our refining system as a nation in order to make unleaded gasoline and meet environmental requirements. Therefore, our industry is quite different from steel and other heavy industry, which in part is suffering from foreign competition because they have not kept themselves modern.

Rising imports of gasoline have placed severe economic pressure on the U.S. petroleum refining industry. Trade publications have reported that seven out of the last 9 quarters our Nation's refineries have lost money. Subsidized gasoline imports have set the price at the margin, which translates across the whole pricing system in the country. This problem is getting worse as OPEC refineries, OPEC nations being on new refineries which have been under construction.

A recent Pace study, which is attached to my testimony, shows that refining capacity in the Middle East will be in excess of 5 million barrels a day by 1990, with product demand of slightly over 2 million barrels a day.

We are particularly concerned because the Japanese and European markets may be closed to those products. Currently Japan prohibits the import of any gasoline, and EEC documents indicate that they are considering a 6 to 7 percent quota limitation on imported petroleum products.

Our current gasoline tariff of 1.25 cents a gallon was set in 1958 when gasoline was at 10 cents a gallon. If Japan allowed any imports, it would be 6 cents a gallon import fee, and the European fee is in the range of 4 cents a gallon.

Mr. Chairman, we believe there is a serious national security issue involved in the demise of the U.S. refining industry. The Nation has invested $15 billion in the strategic petroleum reserve and anticipates an ultimate drawdown rate of 4,500,000 barrels a day from that reserve.

In a disruption, in order to process our current production of crude oil and natural gas, which is 9,300,000 barrels a day, plus the 4.5 million barrels from the strategic storage, would require refining capacity in the range of the 14 million barrels which we're already down to, and we would still be short and importing some product. Therefore, we can ill afford to lose more refineries from subsidized gasoline imports if the taxpayers' investment in the strategic petroleum reserve is to be protected.

In summary, Mr. Chairman, the U.S. refining industry is being severely damaged by subsidized gasoline imports. The damage has just begun as more Middle East refineries come on stream in a soft market. Although these subsidized refineries could not compete with U.S. refineries in a free market, they have available to them many subsidies from their own country.

There are serious national security implications related to the continued demise of the U.S. refining industry. We believe that urgent action is needed now. Gasoline and jet fuel, which are so vital to national security, cannot be stored in the strategic petroleum reserve. The Nation's refineries represent its only strategic storage of gasoline and jet fuel.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Hall follows:]

Statement of John R. Hall
on behalf of
The Independent Refiners Coalition
before the
Senate Energy Committee
United States Senate

June 4, 1985

I am John R. Hall, Chairman and Chief Executive Officer of Ashland Oil, Inc. Ashland Oil is an independent refiner which once operated seven refineries but, today, operates only three. I am testifying today on behalf of the Independent Refiners Coalition (IRC). The IRC is composed of 18 companies and a trade association, the American Independent Refiners Association (AIRA). The IRC represents the interest of 30 independent refiners, which operate approximately one-half of the independent refining capacity of the United States. The independent refining sector represents 26 percent of U.S. operating refining capacity. The Coalition's members and production capacities are listed in Appendix A of this statement.

The IRC appreciates this opportunity to testify on the impact of increasing refined petroleum product imports on the U.S. refining industry. The most significant impact is created by rapidly increasing imports of gasoline and gasoline blendstocks. The result of the increasing importation of these products has been -- and continues to be -- the shutdown of efficient U.S. refining capacity.

Imports of gasoline and gasoline blendstocks increased more than 300 percent from 1980 to 1984, from 128,000 barrels per day to 391,000 barrels per day ("barrels per day" is abbreviated in this text as "b/d"). Gasoline imports equaled about 6 percent of total U.S. gasoline demand in 1984. At the peak level last year, imports of gasoline and gasoline blendstocks averaged about 660,000 b/d or 10 percent of U.S. demand. Yet netback analysis shows that most foreign refiners could not have sold gasoline at a profit in the U.S. market if they paid market prices for their crude oil inputs.

Approximately 60 percent of imports in 1984 came from government-owned or government-controlled refineries. Government ownership and control of refining has increased sharply since 1973. This change has serious consequences for the private refiners operating in the United States. Private refiners can be disadvantaged by a government's ability to discount the price of its state-owned crude oil used in its state-owned refineries at low levels unavailable to U.S. refiners.

In addition, a fundamental change has occurred in the mix of petroleum and refined product imports. In the past, the bulk of our petroleum imports were crude oil, residual fuel oil and distillate fuel oil. The residual and distillate fuel oils were imported primarily from Caribbean and Western Hemisphere suppliers. Today, the mix of petroleum imports has moved toward lighter, higher value-added products, principally gasoline.

The combination of increasing imports and the change in the mix of imports has depressed gasoline refining margins and forced the shutdown of approximately one million b/d of U.S. refining capacity since mid-1983. Our analysis refutes those who believe that this shutdown trend is temporary and does not constitute a serious threat to the U.S. refining industry or to U.S. national security. The facts clearly illustrate that such a threat exists and that it is increasing.

A recent Department of Energy study states that the U.J. should have 14 to 14.9 million b/d of operating capacity. Mr. Chairman, the current operating capacity of the U.S. refining industry is 14 million b/d and falling. We have put one foot over the threshold of an excessive, dangerous reliance on imported gasoline and refined products. Under current conditions, U.S. refinery capacity could undergo a further decline to just over 13 million b/d in 1986. If this is allowed to occur, the risk to our economy and our national security will become unacceptable.

Mr. Chairman, our analysis clearly demonstrates that rapidly-increasing, low-cost gasoline imports have been a significant cause of negative refining margins in the U.S. market for the last two years. It is necessary to understand that U.S. refinery economics are based on the production and sale of gasoline. Approximately half of every barrel of crude refined in the United States is converted to gasoline. If gasoline cannot be sold profitably, U.S. refining margins will continue negative, and additional refineries will be forced to shut down.

The addition of new OPEC refineries, and the enforcement of tariff and non-tariff barriers in Japan and Western Europe, will send increasing quantities of low-priced gasoline and other refined products to the United States. This new supply will shut down more U.S. refineries. The United States must maintain a level of refining capacity capable of responding to a crude oil and refined product import supply disruption, or a military mobilization. The U.S. simply cannot afford to lose any more refineries without significantly impairing the industry's ability to respond to these events.

The hearings of this Committee and other Committees of Congress, as well as preliminary efforts underway in the Administration, are essential to determine not only the magnitude of this threat, but the remedies necessary to correct it. Mr. Chairman, time is a factor. Immediate action is necessary to preserve adequate U.S. refining capacity to meet this Nation's needs and protect its security.

Summary

The U.S. refining industry has undergone a period of major rationalization and modernization since 1980. Most small, inefficient refineries were closed by 1983. We are now undergoing a second wave of shutdowns -- not of inefficient, older plants but of sophisticated refineries that produce high volumes of light products such as gasoline. These refineries are closing because a barrel of refined product has been selling for less than its production cost. A primary cause of losses on refined product sales has been the increase in imports of low-priced gasoline and gasoline blendstocks.

In seven of the last nine quarters, most U.S. refineries posted significant losses. Similarly, our analysis indicates that most foreign refiners could not have exported gasoline to the United States at a profit during this period while paying market prices for their crude oil inputs. The only way that foreign refiners could export gasoline to the U.S. market at low prices was to discount their crude oil cost below its world market price. Such discounting can be easily accomplished by state-owned or assisted refining operations. We believe this practice constitutes a clear subsidy. It is equally clear that U.S. refiners cannot compete against this practice.

The United States has reduced its operating refinery capacity by four million b/d since January 1981, a 22 percent reduction. Roughly three million of the four million b/d of capacity were displaced by oil price decontrol and declining demand. This rationalization process was basically completed by 1983 and mainly involved small, less-efficient topping units. To stay competitive, U.S. refiners began converting their plants to use heavier crude oil while achieving higher yields of light products.

In the last half of 1983, imports of gasoline and blending stocks began to rise rapidly. The one million b/d of capacity lost since that time were shut down due to negative refining margins caused by low-priced gasoline imports.

It must be understood that U.S. refinery economics have been and will continue to be based mainly on the production and sale of gasoline. Half of the total output of our refineries is gasoline. The industry concentrates on gasoline production for an obvious reason. U.S. gasoline demand in 1984 averaged 6.7 million b/d, or about 44 percent of the world-wide demand for gasoline. This compares to about 16 percent in Europe and 10 percent in Asia and the Pacific, including Japan.

As of February 1, 1985, the Department of Energy estimated that there were 14.24 million b/d of operating U.S. refining capacity. Using DOE and press reports, the IRC estimates that only 14 million b/d are currently operating.

DOE attempts to monitor the condition of the U.S. industry by differentiating between "operable" and "operating" plants. The operable capacity number includes plants which are "idle" as well as plants that are actually operating. Idle plants are those which are not operating, but are believed to be restartable within 30 to 90 days in case of need. In fact, so-called idle plants may have deteriorated beyond repair. In many cases, refiners prefer to term a shutdown plant as "idle" in order to defer heavy financial and environmental costs associated with shutdown.

When determining the capacity utilization of the U.S. refining industry, it is misleading to compare actual output against "operable" capacity. Doing so will distort the true operating rate and make it appear that the U.S. industry is running at only 75 percent of capacity. The myth that we have a large amount of capacity which is sitting idle but ready to be quickly returned to service if needed must be dispelled.

Realistic observers judge industry output in terms of plants actually operating. Today, the U.S. refining industry is running at approximately 85 percent of operating capacity. This rate approximates the average operating rate of the industry. Only twice in the last 35 years has the U.S. industry exceeded 90 percent utilization for a year's time.

Europe and Japan, the other major refined product markets, have also shut down refining capacity. In most cases the shutdowns involved simple refineries, similar to those closed in the first round of U.S. refinery shutdowns. Japan minimized the reduction of its refining industry by a simple method: disallowing all imports of gasoline and limiting all other refined product imports to about 10 percent of demand.

Western Europe is still a net exporter of refined products. The ability of European refiners to export gasoline to the U.S. may be traced to the European Community's selective tariff structure. The EC allows Arabian and North African gasoline and refined product imports preferential, duty-free entry up to certain limits. The limits have not been enforced thus far, but the threat of increased exports from the Middle East has triggered calls for enforcement of the limits.

The duty-free inflow of North African and Middle Eastern product functions to back European production out of Europe toward the United States, where the tariff rate is only 1.25 cents per gallon. On the other hand, the EC enforces a tariff of 6 percent ad valorem on gasoline imports from non-preferential suppliers like the U.S. and Communist countries -- about 5 cents per gallon at current prices.

The U.S. market will soon feel the impact of additional imports from new export refineries in the Middle East and other OPEC countries. The opening of these new refineries adds a new chapter to the continuing expansion of government controlled refining. In 1973, governments controlled about 15 percent of Free World refining. By the end of 1986, about 50 percent of Free World refining will be under government control.

According to a study commissioned by the IRC with the Pace Company, the new Middle East refineries cannot compete with domestic refineries on a free trade basis -- that is, by paying world market prices for crude oil. The Pace study indicates that new OPEC refiners will penetrate the U.S. market by using price subsidies, discounting their crude oil inputs at prices unavailable to U.S. refiners buying the same crude oil. Such unfair competition, in conjunction with continuing diversion caused by Japanese and European tariff and non-tariff barriers, will force additional domestic shutdowns.

The United States cannot afford to lose any more of its refineries. At the current operating capacity level, our ability to utilize the crude oil stored in the Strategic Petroleum Reserve or respond to a military mobilization are already questionable.

We have succeeded in reducing imports of crude oil -- but have increased the importation of the products made from crude oil. In effect, we are substituting one form of petroleum import dependence with another. This new dependence on refined product imports presents an entirely new energy security problem. A supply disruption today would probably involve both crude oil and refined product imports. Increasing dependence on refined product imports, particularly gasoline, from OPEC and Communist countries compounds the risk of import dependence beyond justification. Without an adequate domestic refining industry, the inability to respond to a refined product import disruption would create a far greater domestic energy emergency than occured in 1973 or 1979.

With operating capacity of 14 million b/d, we are already unable to meet normal domestic demand for gasoline. The IRC estimates that increasing imports of gasoline and other refined products in 1985 and 1986 could displace another 700,000 - 800,000 b/d of refining capacity. This would drop operating U.S. refining capacity to 13.2 - 13.3 million b/d in 1986. The Pace Study reaches a similar conclusion. This diminished level of operating capacity would be insufficient to meet the the national security and military mobilization requirements of the United States.

U.S. refiners have converted, or have begun converting, to comply with lead phase-down standards. Refiners with inadequate capital to make the conversion would, expectedly, be displaced by the new lead standards. However, many refineries capable of converting under normal competitive conditions have been compromised by refining losses generated by the increase of low-priced imports. Continuing price depression has been particularly hard on independent refiners. Most independents do not own their own crude oil supplies and cannot recoup refining losses with profits on crude oil sales or other operations. Even integrated oil companies cannot continue to sustain losses on refining operations over time.

If gasoline imports continue at 1984 levels or increase, more U.S. refining capacity will shut down. The United States will double its reliance on foreign nations for refined products, particularly gasoline. The result of inadequate domestic refining capacity will be the magnification of any supply disruption -- meaning serious fuel shortages in the U.S. economy in the event of military mobilization.

The Leader in World Refining

The decontrol of U.S. oil prices and a decline in demand for refined products quickly ended the days of the small, inefficient and unsophisticated U.S. refinery. About three million barrels a day of U.S. refining capacity were shut down in this rationalization process from 1980 to 1982.

During this period, the industry invested $12 billion in technology to use heavier crude oil to produce more gasoline and other light products per barrel. This upgrading has made the U.S. refining industry "the most flexible in the world and the world leader in refining technology." ("U.S. Refining Capacity Resumes Decline," Oil & Gas Journal, Annual Refining Issue, March 18, 1985).

Independent refiners today represent about 26 percent of domestic refining capacity, and provide approximately 50 percent of military fuel needs. According to an industry study, the complexity of independent refineries is on par with major refineries, and the efficiency of independent refineries is equivalent or better.(Chart 1) According to the Oil & Gas Journal, U.S. refineries are twice as sophisticated as the world average. One measure of this is the ratio of downstream refining capacity to crude oil distillation capacity. The U.S. refining industry had 2.05 barrels of downstream capacity for each barrel of operating distillation capacity on January 1, 1984. IRC members had 2.13 barrels of downstream capacity per barrel of distillation capacity.(Appendix A) The world outside the U.S. had only 0.96 barrels of downstream capacity per barrel of crude distillation. This explains why the

U.S. yield of gasoline per barrel of oil processed is about twice the average gasoline yield of refineries outside the U.S.

It must be understood that U.S. refinery economics have been and will continue to be based mainly on the production and sale of gasoline. Half of the total output of our refineries is gasoline. The industry concentrates on gasoline production for an obvious reason. The U.S. market alone currently accounts for 44 percent of the world-wide demand for gasoline. This compares to about 16 percent in Europe and 10 percent in Asia and the Pacific, including Japan.

U.S. refineries are maintaining the flexibility to handle many types of crude oil, including less attractive heavy grades. This flexibility is necessary because the U.S. gasoline market is the largest in the world. Half of our refinery production is gasoline. U.S. refinery economics is based on gasoline sales.

Imports: Why U.S. Refineries Are Losing Money

Despite the fact that the U.S. refining industry sets the world standard for efficiency, sophistication and technology -- and despite the comparatively favorable price of domestically-produced crude oil and generally declining imported crude prices -- U.S. refiners have posted significant losses in seven of the last nine quarters.(Source: Wright, Killen & Feldman, Oil & Gas Journal, May 21, 1985).

Our analysis indicates that the primary cause of this loss was the dramatic increase in imports of gasoline and gasoline blendstocks which began in the last half of 1983. To check the validity of this hypothesis, we plotted Chart 2, which shows the average annual Gulf Coast Operating margins as well as the imports of gasoline and blendstocks since 1975. The chart shows that when gasoline imports decreased, margins increased; and when gasoline imports increased, margins decreased. To further verify the cause and effect relationship, the margins were plotted directly against the imports in Chart 3. If there is a relationship, these points should fall roughly into a straight line. As you can see on Chart 3, imports of gasoline and blendstocks are indeed the cause of the recent negative U.S. refining margins.

A barrel of refined petroleum product has been selling in the U.S. market for less than its production cost. Most foreign refiners -- if not all -- could not have exported gasoline to the United States at a profit if they paid market prices for their crude oil inputs.

Approximately one million b/d of U.S. capacity has been shut down by negative margins caused by low-priced gasoline and other product imports from foreign sources in the last two years. Despite negative margins on refined product sales in the U.S. market, imports continued to increase over this period.

Overall, imports of gasoline and blendstock have increased more than 300 percent since 1980, from an average of 128,000 b/d to an average of 391,000 b/d in 1984.(Chart 4) At this level, gasoline imports equaled about six percent of total U.S. gasoline demand. In May of last year, imports of gasoline and blendstock averaged about 660,000 b/d, or about 10 percent of total demand.(Chart 5; also Charts 6, 7 and 8)

It is important to understand the fundamental change in the mix of petroleum and refined product imports. In the past, the bulk of our petroleum imports were crude oil, residual fuel oil and distillate fuel oil. The residual and distillate fuel oils were imported primarily from Caribbean and Western Hemisphere suppliers. Today, the mix of petroleum imports has moved toward lighter, higher value-added products, principally gasoline.(Charts 9, 10 and 11)

Discounted Crude Prices to Foreign Refiners

The problem of product imports would not be as serious as it is today if these products came from refineries that had to pay world market crude prices and operate at a profit. However, about 60 percent of our imports in 1984 came from government-owned or controlled refineries, which do not have to operate as profit centers. Most of the projected additions to world capacity will be government-owned or controlled, and will put even more pressure on refineries that operate for profit.(Chart 12)

The only way that foreign refiners can beat U.S. refiners in the U.S. market -- I emphasize, the only way -- is by significantly discounting the price of crude oil used in producing refined products like gasoline. U.S. refiners cannot obtain such discounts on crude oil. While there is weakening of the OPEC official prices and widespread selling below posted and spot prices in world markets, the fact remains: when foreign governments own their crude oil and also the refineries which use it, they can discount crude oil to their own refiners in order to penetrate foreign markets.

Today, the problem of competing against government-assisted refineries is exacerbated by the proliferation of netback crude processing deals (Wall Street Journal, May 16, 1985). Under processing deals, the crude oil-producing nation pays a product refiner an agreed-to "processing fee" for converting crude oil to products and selling them, in lieu of selling crude oil to a refiner at current market prices. In today's market, the least-efficient refiners are most likely to agree to such arrangements. This makes them indifferent to margin economics, and creates a situation in which inefficient refiners operate while efficient refineries shut down.

By converting crude oil to value-added refined products, some producers can discount from OPEC or government-set crude pricing benchmarks without appearing to undercut them. Whatever the rationale of the foreign producers, low-priced gasoline imports mean negative refining margins on gasoline sales in the U.S. market and the continued decline of the U.S. industry.

U.S. Refining Capacity

The U.S. refining industry has undergone a period of major rationalization and modernization since 1980. Most small, inefficient refineries were closed by 1983. We are now undergoing a second wave of shutdowns -- not of inefficient, older plants but of sophisticated refineries that produce high volumes of light products such as gasoline.

The United States has reduced its operating refinery capacity by four million b/d since January 1981, a 22 percent reduction.(Charts 13 and 14) Roughly three million barrels were displaced by oil price decontrol and as a result of declining demand. This rationalization process was basically completed by 1983 and mainly involved small, less-efficient topping units. To stay competitive, U.S. refiners began converting their plants to use heavier crude oil while achieving higher yields of light products.

In the last half of 1983, imports of gasoline and blending stocks began to rise rapidly. The one million b/d of refining capacity lost since that time were shut down due to negative refining margins caused by low-priced gasoline imports.(Charts 13, 14 and 15)

The IRC estimates that, as of May 1, 1985, U.S. refining capacity in operation was 14.0 million b/d. Above this operating level, there were 1.1 million b/d per day of so-called idle capacity. Under current conditions, it appears that most of this idle capacity will never be brought back on line, and it may already be true that much of it is not idle but shut down for good.

There is controversy over how much capacity is actually useable capacity. The DOE makes two classifications for refineries: operating and idle. Operating refineries are refineries actually operating. Idle refineries are refineries which are not operating, but thought to be capable of being restarted within 30 to 90 days.

The National Petroleum Council (NPC) is investigating the status of refining capacity. The NPC investigation may reveal that much of the so-called idle capacity is past the point of being returned to service. In many cases, refiners prefer to term a shutdown plant as idle in order to defe heavy financial and environmental costs associated with shutdown.

In the event of an emergency requiring increased output from the refining industry, plants listed as idle would not simply be "turned back on" to achieve increased production.

Once a refinery is idled, the repair and refitting costs of restarting it are very high, crude inventories must be purchased, and personnel must be thoroughly trained to operate the plant safely. We estimate the costs of restarting a 100,000 b/d refinery and training personnel to operate it safely to be as high as $250 million. Industry experience indicates that the government's use of 30 to 90 days as a startup time may be unrealistic. Based on our experience, restart time is in the neighborhood of 90 to 180 days. In addition, restarted plants cannot be expected to run at 85 to 90 percent rates for some time after restart. Finally, about two months' inventory of crude oil must be purchased and available before operations can be sustained.

When determining the capacity utilization of the U.S. refining industry, it is misleading to compare actual output against "operable" capacity. Doing so will distort the true operating rate and make it appear that the U.S. industry is running at only 75 percent of capacity. The myth that we have a large amount of capacity which is sitting idle but ready to be quickly returned to service if needed must be dispelled.

Realistic observers judge industry output in terms of plants actually operating. Today, the U.S. refining industry is running at approximately 85 percent of operating capacity. This rate approximates the average operating rate of the industry. Only twice in the last 35 years has the U.S. industry exceeded 90 percent utilization for a year's time.(Chart 16)

Using 1983 data, Dr. Fereidun Fesharaki, a consultant to the Department of Energy, calculated an "ideal" average U.S. refining capacity requirement of 12.65 million b/d, assuming 100 percent utilization and no finished product imports. In updating his analysis in March of this year, Dr. Fesharaki acknowledged that a utilization rate of 85 to 90 percent is more realistic, and concluded that the United States could be "comfortable" with a refining capacity of 14 to 14.9 million b/d. A summary of Dr. Fesharaki's analysis, using both 1983 and 1984 data, shows a slightly higher capacity requirement. (Chart 17)

Since about two barrels of crude oil are required to produce one barrel of finished gasoline, each barrel of imported gasoline can shut down two barrels of crude conversion capacity. Net imports of finished gasoline, which averaged 286,000 b/d in 1984, are projected to average 425,000 b/d by 1986, according to the Pace study. Imports of blendstocks were assumed unchanged at about 80,000 b/d. Pace estimates that net distillate imports, which averaged 269,000 barrels per day in 1984, will reach 624,000 b/d in 1986.

The impact of this new import supply puts another 700,000 to 800,000 b/d of U.S. capacity at risk by 1986, based on the IRC's estimate of 14 million b/d of operating U.S. refinery capacity today. Losing this capacity would leave the United States with a refining industry capable of processing 13.2 - 13.3 million b/d of crude oil.(Chart 13) This level of capacity would be totally insufficient to serve the national security demands of the United States in the event of a supply cutoff or a military mobilization. The industry's ability to respond to either crisis is already impaired.

U.S. National Security

Increasing import penetration of the U.S. market creates a series of interrelated consequences. Imports directly displace U.S. refining capacity.(Chart 18) The loss of domestic capacity has driven down U.S. oil prices and has a negative effect on crude oil exploration and production. The ongoing displacement of U.S. refining capacity poses a clear and compelling threat to the national security of the United States. Without adequate refining capacity, we cannot sufficiently utilize the crude oil stored in the Strategic Petroleum Reserve to offset a supply disruption of gasoline or other refined products.(Charts 19 and 20)

Current military fuel use is about 500,000 b/d.(Chart 21) In the event of a full military mobilization, military demand could increase to two million b/d immediately. Of course, a portion of this mobilization demand would be taken from the private sector. However, even with a drastic curtailment of civilian consumption, a shortfall in refining capacity is likely. We have been unable to determine whether appropriate agencies of the government have fully examined this potential shortfall or its impact on both industrial capacity and military capability.(Chart 22)

Learning hard lessons from the energy crises of 1973 and 1979, we constructed -- at great expense -- an elaborate system of law and infrastructure to protect U.S. national security in the event of a crude oil import disruption. The major element of this strategy was the establishment of the Strategic Petroleum Reserve to limit our dependence on crude oil imports in time of emergency.

Without sufficient domestic refining capacity, the purpose of the Reserve is defeated. A sufficient supply of crude oil is one thing -- the ability to refine it into essential products is another. To protect national security, we need both. To increase our dependence on imported refined products is to substitute one form of energy dependence with a more dangerous form.

By adding together the domestic crude production rate, natural gas liquids and the SPR withdrawal rate, we can determine how much capacity is needed to utilize the SPR in time of emergency at a given rate of withdrawal.(Chart 20) Processing the maximum SPR withdrawal of 4.5 million b/d with current operating capacity would require an unrealistic and unsustainable utilization rate of 100 percent at every refinery in the country.

Assuming a realistic utilization rate of 85 percent, the U.S. refining industry could handle an SPR withdrawal rate of 2.7 million b/d. This assumes that enough SPR oil could be delivered to enough refineries throughout the country to achieve an overall 85 percent utilization -- which is unlikely.

Mr. Chairman, if U.S. operating capacity falls to 13.2 or 13.3 million b/d, the ability of the industry to respond in timely fashion to a crisis will be dangerously eroded. The usable SPR withdrawal rate would decrease to 1.5 million b/d. In a nutshell, the industry could process current domestic production plus another 1.5 million b/d of crude -- whether the 1.5 million barrels came from the SPR or from reliable foreign suppliers.

New OPEC Export Refineries Will Cause More U.S. Shutdowns

The addition of massive new refined product export capacity in OPEC nations is causing another wave of refinery shutdowns in the United States. A study commissioned by the IRC with the Pace Company of Houston, Texas, indicates that these new export refineries cannot compete with U.S. refineries on a free trade basis, and that they will penetrate the U.S. market by discounting their crude oil inputs. The addition of these new OPEC refineries, coupled with trade barriers existing in Japan and Western Europe, will cause the diversion of large quantities of new refined products, especially gasoline, to the United States.

By the end of 1985, OPEC producers in the Middle East and Indonesia will have added 1.2 million b/d of new capacity since 1984 (Oil & Gas Journal, June 25, 1984). Most of this new production will be exported. Dr. Abdulhady Taher, Saudi Arabia's Governor of Petromin, the state refining operation, referred to the new 250,000 b/d refinery at Yanbu as follows: "We designed the Yanbu refinery in particular with the U.S. in mind. The gasoline (unleaded) is not good for Europe. Basically, it is good for the United States."("Oil and Money in the Eighties" conference, London, England, October 1984.)

In total, we estimate that OPEC will have brought on stream 1.9 million b/d of new capacity by 1987 (Oil & Gas Journal, June 25, 1984). In addition, Nigeria has just announced the addition of a large new export refinery.

European and Japanese Trade Barriers Will Divert Product Here

This new product flow will enter a glutted world marketplace. According to the Pace Study, "In a completely free market situation, expensive new export refineries [in the Middle East] would be delayed and/or cancelled and those already completed would run at a minimum rate." The point here is that the so-called "free market" has little to do with government expansion programs. We assume that these government refineries will run at the 85 - 90 percent rate regardless of demand conditions in export markets, absorbing any losses on refined product sales by discounting crude input prices from world market levels.

The EC estimates that new refining capacity in just three countries -- Saudi Arabia, Kuwait and Libya -- will produce about 1.2 million b/d of new refined products for export by 1990. The EC anticipates being able to absorb no more than one-third of this new supply. The EC is proposing that the U.S., Japan and the EC should enter bilateral agreements to accept a third of this new supply each (Commission of the European Communities Report, Brussels, March 1, 1985).

There is a major obstacle in the way of such concordance. The Japanese have rejected the notion of sharing the new Middle East exports (Platt's Oilgram News, May 23, 1985). Currently, Japan does not permit any gasoline imports at all.(Appendix B) Japan bases its restrictive policy in part on national security requirements and in part on economics. In Japan, high gasoline prices subsidize the production of lower-cost kerosene, Japan's major source of home heating fuel. Japan will be reluctant at best to import gasoline at the risk of shutting down its refineries and raising the price of home heating fuel.

Press reports have indicated that U.S. diplomatic sources assert that market forces should direct the flow of this new production. Because transportation costs from the Persian Gulf to Europe and the Far East are significantly below transportation costs to the United States, market forces should direct the product to those two regions. But if Europe takes only one-third of the new production -- in effect, limiting imports of all refined products to a net of seven percent of total demand -- and Japan keeps its market closed, the lion's share of the new product will come to the United States. It will be sold at whatever price is necessary to penetrate this market.

Existing Trade Barriers in Japan and Europe Compared to the United States

A recent analysis by the consulting firm of Nytex-Bridgeview Petroleum (*Petroleum Intelligence Weekly*, May 6, 1985) compares tariffs and other trade barriers between the three major refined products markets: the U.S., Japan and Western Europe.

Japan has the highest barriers. *PIW* reports, "The present combination of import quotas and tariffs virtually rules out imports of gasoline and many other light finished products, but is less stringent on naphtha and straight-run low sulphur fuel oil." If Japan did allow any gasoline imports, the effective tariff would be $2.22 per barrel.

EC tariffs are lower than Japan's, but higher than U.S. tariffs on most products. Naphtha and crude enter the EC tariff-free. Arabian and North African producers enjoy preferential duty-free status (GSP) on all petroleum products, but only up to a specified level. This limitation has not generally been enforced to-date. The EC's non-preferential gasoline tariff is 6 percent *ad valorem*. This tariff largely keeps out gasoline from non-preferential sources like the United States, Eastern Europe and the Soviet Union. This *ad valorem* tariff may be applied to imports from Arabian and North African producers that exceed their GSP-allowable levels. The gasoline tariff in Europe is $1.66 per barrel.

U.S. gasoline tariffs are generally the lowest. The effective tariff rate is 52.5¢ per barrel, or 1.25¢ per gallon.

Conclusions of the Pace Study on the Impact of Imports

The IRC commissioned the Pace Company to study the impact of the new Middle East refineries on the U.S. industry and marketplace. Mr. Chairman, we request that the summary of this report be included in the record.

The Pace Study uses three assumptions: first, that Japan will not allow any gasoline imports, as indicated by past and recent actions; second, that Western Europe will limit total refined product imports to a net of seven percent of total demand, as indicated by preliminary EC documents; and third, that Middle East refineries will run at maximum utilization of conversion units.

Pace states, "Based on assumed high utilization of new Middle East refinery capacity and restricted entry into European and Japanese markets, imports of refined products in the United States will be high. The imports of refined products are expected to be 1,049,000 barrels per day of major light products (gasoline and distillate) -- 9.8 percent of demand -- in 1986 and 1,301,000 b/d (12.6 percent of demand) in 1990, versus 1982 and 1983 at 2.2 and 3.7 percent of demand, respectively."

According to Pace, "Even in the absence of trade barriers elsewhere, and even if Middle East refiners run at less than maximum capacity, imports of refined products in the United States will capture a significant share of total demand. Based on this "free market" scenario, the major [finished] light products imports (gasoline and distillates) will be 536,000 barrels per day (5 percent of demand) in 1986 and 640,000 barrels per day (6.2 percent of total demand) in 1990." Those imports do not include blendstocks, unfinished gasolines or distillates which require only blending tanks, not refinery capacity, to be converted to finished products.

Pace states, "Increasing refined products imports will result in loss of market by domestic refiners. In the absence of [U.S.] trade barriers, United States refiners will be forced to reduce crude capacity utilization by over 1,400,000 barrels per day in 1990." Of critical importance here is Pace's estimate that over one million b/d of this capacity reduction would take place in 1985 and 1986 (from DOE's February estimate of 14.24 million b/d of operating capacity). This would lower U.S. capacity to 13.24 million b/d in 1986, an estimate which concurs with the IRC's estimate.

Pace states, "Middle East export refineries cannot compete with indigenous United States refineries on a free trade basis. The cost of delivered refined products, derived on an equal crude cost basis, would be higher from a Middle East export refinery than from a United States refinery." Pace cites higher transportation costs on refined products than on crude oil, and the fact that the capital construction cost of Middle East refineries is 60 percent higher than such cost in the United States. These disadvantages more than offset any advantage resulting from the use of previously-flared natural gas as a refinery fuel.

Pace states, "New Middle East export refineries will penetrate United States markets using price subsidies. Since Middle East export refiners cannot compete with indigenous [U.S.] refiners on a free trade basis, they will enter United States markets by providing the crude to their own refineries at or below cost. Thus they will differentiate between the transfer price of crude used to make export products and crude sold for export. United States refiners will be required to pay a higher price for the same crude."

Concerning the Strategic Petroleum Reserve, Pace states, "As the United States increases imports of refined products and shuts down refineries, the reserve becomes of less value since refining capacity is needed to turn the crude into refined products. In the event of severe disruption of imports in 1990, it is conceivable that the United States could be 1.2 to 1.4 million barrels short of refined products regardless of the size of the Strategic Petroleum Reserve."

Recommendations for Action

To prevent the further decline of U.S. refining capacity, we advocate the imposition of quotas or tariffs, or a combination of both. The object of such measures is to assure a domestic refining industry adequate to meet the Nation's refined product and national security needs. We also support changes in the trade laws to recognize that certain crude oil discounting practices are subsidies under the countervailing duty laws. Such changes would provide a partial, long-term remedy to unfair discounting.

Current U.S. motor fuel tariffs were established in 1958 at 1.25 cents per gallon. At that time, when wholesale gasoline was priced at 11.55 cents per gallon, the tariff was equivalent to 10.8 percent ad valorem. In 1984, wholesale gasoline averaged 83.2 cents per gallon. While gasoline prices have increased sevenfold since 1958, the gasoline tariff has remained fixed at its original level. The absence of a self-adjusting ad valorem tariff structure for imported gasoline has made the United States the international dumping ground for the world's surplus refined product.

In the House, Representative Beryl Anthony (D-Arkansas) has introduced H.R. 2354, which would apply a 10.8 percent ad valorem tariff to the first 200,000 b/d of imported gasoline. Volumes beyond that amount would be subject to a second-tier national security tariff of 21.6 percent. We expect a companion bill to be introduced shortly by the Senate Finance Committee, and urge you to consider co-sponsoring such a bill.

In addition, House Ways and Means Trade Subcommittee Chairman Sam Gibbons (D-Florida) has introduced H.R. 2451, which would apply countervailing duties to imports in the event of proven natural resource subsidization. While we support this change, it is not a timely solution to the problem of increased gasoline imports. It would address the long-term problem of discounting, but another 700,000 to 800,000 b/d of U.S. capacity could be lost before Congress passes the legislation and trade cases are filed under it. Current trade laws are clearly inadequate to deal with crude oil discounting below world market prices.(Appendix C) This conclusion is supported by the most recent study on natural resource subsidies by the International Trade Commission.

This Subcommittee has a primary oversight role on energy policy and national security. We urge the Committee to request the Department of Energy and the Administration to cooperate fully with industry to develop more timely and useful data on refining capacity. The NPC study will be a solid beginning, from which DOE should maintain monthly capacity data. The Senate Energy Committee should work with DOE to assure itself, on a quarterly basis at the minimum, that the United States has adequate useable capacity to meet our needs in time of emergency.

We seek your counsel in designing the best remedy to this threat. In addition to proposed tariff changes, we have developed a quota system which would provide an open auction for a limited volume of gasoline imports on a quarterly basis, with the revenues from the import rights going to the U.S. Treasury. This system would have better results than the Japanese auto quotas that enriched Japanese and U.S. manufacturers alike.

The remedies we are proposing are not without problems and each will have its detractors. But the clear threat to national security must, in the final analysis, outweigh our general reluctance to impose immediate and effective remedies. Complacency should not direct our national energy policies. It is becoming very difficult to continue promoting the myth that we enjoy excess refining capacity in light of the current statistics. If we wait too long and refining capacity continues to decline as gasoline imports increase, the decline will be more difficult to stop.

The citizens of the United States have invested $15 billion to-date in the SPR, and this investment will rise to $27 billion if the SPR is filled to 750 million barrels. The wisdom of this investment is unquestionable. But we cannot economically construct a strategic reserve of gasoline. Our refineries must fill the role of this strategic reserve. They are as essential to our Nation's security and well-being as the SPR itself.

CHART I

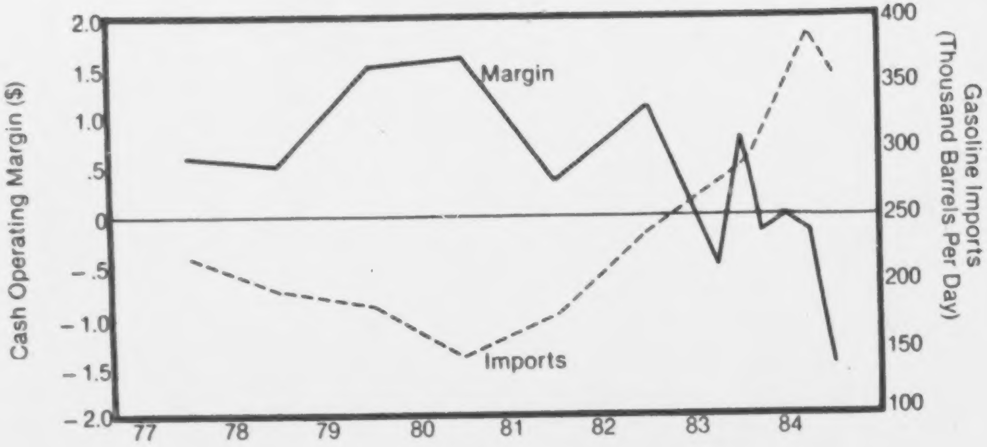
COMPARISON OF COMPLEXITY AND EFFICIENCY BETWEEN INDEPENDENTS AND MAJOR OIL COMPANIES

	1982		Inds. Adv.	1983		Inds. Adv.
	Majors	Independs	Over Majs.	Majors	Independs	Over Majs.
Complexity	9.11	9.08	(.03)	10.50	10.30	(.20)
Fuel Use (MBTU/Barrel)	536	496	40	663	525	138
Overall Wt. Loss (%)	0.87	0.68	.19	0.61	0.70	(.09)
Cash Operating Costs ($/Barrel)	3.97	3.72	.25	3.78	3.44	.34
Average Plant Age (years)				22	14	8
Number of Refineries in Survey	54	21		46	25	

Source: "Fuels Refining Performance Analysis," Lee H.Solomon

CHART 2

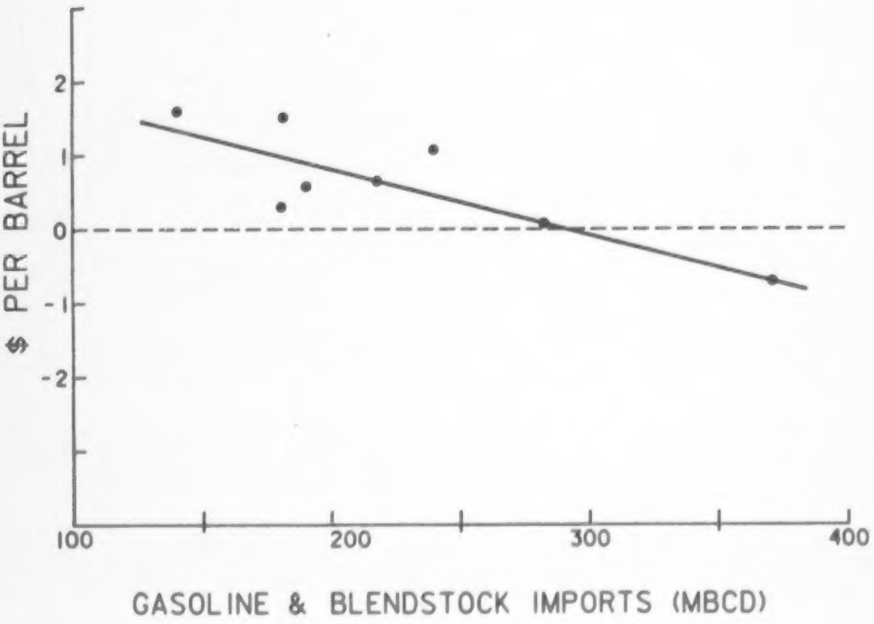
Refinery Cash Operating Margin
vs.
Gasoline & Gasoline Blendstock Imports



Source: Margin per Wright, Killen & Feldman, Inc. O&G Journal, 11/9/84 and 4/15/85, Imports per Petroleum Supply Monthly, DOE

CHART 3

IMPACT OF IMPORTS ON REFINING MARGINS



MPORTS

SOURCE: DOE/EIA, ORA

CHART 4

Adjustment for Naphthas to Other Uses
(MBCD)

Year	Total Gasoline & Naphtha Imports(1)	Naphthas to Petrochemicals(2)	Special Naphthas(2)	Total Less Naphthas to Petrochemicals	Net Market Share(3)	Total Less Special Naphthas and Naphtha to Petrochemicals	Net Market Share(3)
1978	205	8	5	197	2.7%	192	2.6%
1979	208	11	10	197	2.8	187	2.7
1980	168	31	9	137	2.1	128	1.9
1981	191	10	9	181	2.7	172	2.6
1982	263	18	19	245	3.7	226	3.5
1983	339	13	25	326	4.9	301	4.5
1984	480	33	56	447	6.7	391	5.8
1985(4)	404	17	32	387	6.0	355	5.5

(1) Department of Commerce.
(2) Department of Energy.
(3) Based on motor gasoline supplied as per DOE/EIA Monthly Energy Review, January, 1985.
(4) Year-To-Date, February.

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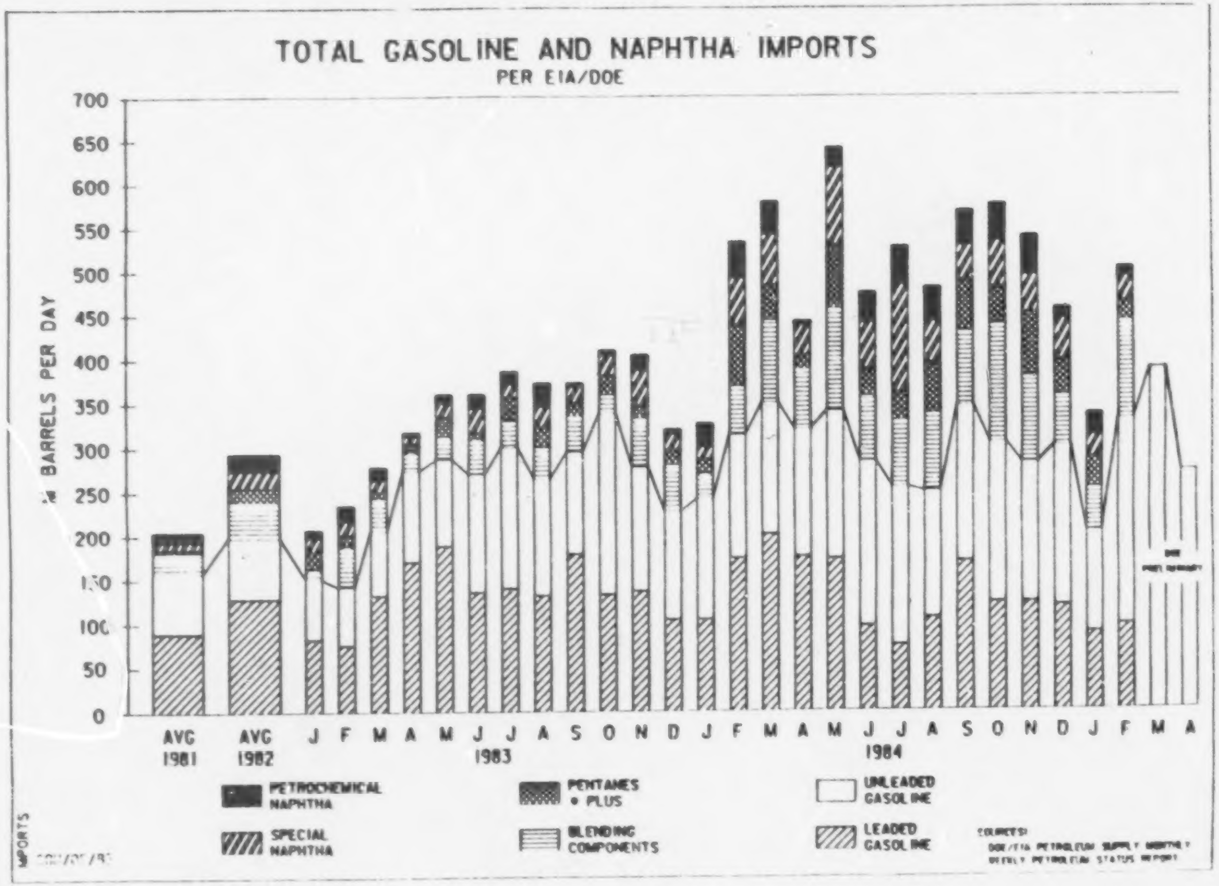
05/07/85

CHART 5



TOTAL GASOLINE AND NAPHTHA IMPORTS

PER EIA/DOE

SOURCES:
DOE/EIA PETROLEUM SUPPLY MONTHLY
WEEKLY PETROLEUM STATUS REPORT

CHART 6

U.S. GASOLINE* IMPORTS BY COUNTRY OF ORIGIN

Cumulative January-December 1984

			% of Total Gasoline Imports		% of U.S. Gasoline Supplied	
Country of Origin	M Barrels	MB/D	Market Share	Accumulated	Market Share	Accumulated
1. Venezuela	22,412	61.2	22.2	22.2	0.9	0.9
2. Netherlands	14,700	40.2	14.6	36.8	0.6	1.5
3. Brazil	12,554	34.3	12.4	49.2	0.5	2.0
4. China	10,453	28.6	10.4	59.6	0.4	2.4
5. Canada	9,542	26.1	9.5	69.1	0.4	2.8
6. Italy	6,556	17.9	6.5	75.6	0.3	3.1
7. Romania	4,533	12.4	4.5	80.1	0.2	3.3
8. United Kingdom	3,985	10.9	3.9	84.0	0.2	3.5
9. Netherland Antilles	3,673	10.0	3.6	87.6	0.1	3.6
10. Spain	1,744	4.8	1.7	89.3	0.1	3.7
Other**	10,908	29.8	10.8	100.0	0.4	4.1
Total:	101,060	276.2	100.0		4.1	

* Imported under TSUSA No. 475.25

** Includes in descending order, Belgium, Greece, West Germany, France, Trinidad, Mexico, United Arab Emirates, Saudi Arabia, Yugoslavia, Argentina, Algeria, Bahrain, Phillippines, Turkey, Cyprus, Uruguay, and U.S.S.R.

Source: Imports--U.S. Department of Commerce, Import Series IM145X; U.S. Gasoline Supplied--U.S. Department of Energy, Monthly Energy Review.

AF:CH/sc
04/22/85

CHART 7

U.S. GASOLINE & NAPHTHA* IMPORTS BY COUNTRY OF ORIGIN

Cumulative January-December 1984

				% of Total Gasoline & Naphtha Imports		% of U.S. Gasoline Supplied	
	Country of Orgin	M Barrels	MB/D	Market Share	Accumulated	Market Share	Accumulated
1.	Venezuela	38,237	104.5	21.8	21.8	1.6	1.6
2.	Netherlands	15,175	41.5	8.6	30.4	0.6	2.2
3.	Canada	12,816	35.0	7.3	37.7	0.5	2.7
4.	Brazil	12,807	35.0	7.3	45.0	0.5	3.2
5.	Romania	12,168	33.3	6.9	52.0	0.5	3.7
6.	China	11,845	32.4	6.8	58.7	0.5	4.2
7.	Algeria	9,167	25.1	5.2	63.9	0.4	4.6
8.	Italy	8,934	24.4	5.1	69.0	0.4	4.9
9.	Netherland Antilles	6,970	19.0	4.0	73.0	0.3	5.2
10.	United Kingdom	6,532	17.9	3.7	76.7	0.3	5.5
11.	Bahamas (N)	5,755	15.7	3.3	80.0	0.2	5.7
12.	Mexico	5,061	13.8	2.9	82.9	0.2	5.9
13.	Indonesia (N)	4,535	12.4	2.6	85.5	0.2	6.1
14.	India (N)	3,406	9.3	1.9	87.4	0.1	6.3
15.	United Arab Emirates	3,036	8.3	1.7	89.1	0.1	6.4
16.	Spain	2,465	6.7	1.4	90.5	0.1	6.5
17.	Belgium	2,373	6.5	1.4	91.9	0.1	6.6
18.	Saudi Arabia	1,859	5.1	1.1	92.9	0.1	6.7
19.	Greece	1,702	4.7	1.0	93.9	0.1	6.7
20.	West Germany (G)	1,474	4.0	0.8	94.7	0.1	6.8
	Other**	9,287	25.2	5.3	100.0	0.4	7.2
	Total:	175,604	479.8	100.0		7.2	

(G) Only gasoline imports.
(N) Only naphtha imports

* Includes imports under TSUSA Nos. 475.35 and 475.25.

** Includes In descending order, France, Trinidad, Argentina, Bahrain, Singapore (N), Peru (N), Yemen, Tunisia, Philippines, Yugoslavia, Norway, Cyprus, South Korea, Uruguay, U.S.S.R., Malaysia, Gabon, and Australia.

Source: Imports--U.S. Department of Commerce, Import Series IM145X; U.S. Gasoline Supplied--U.S. Department of Energy, Monthly Energy Review.

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04/22/85

CHART 8

Known Imports of Gasoline/Blendstocks

Source: Department of Commerce

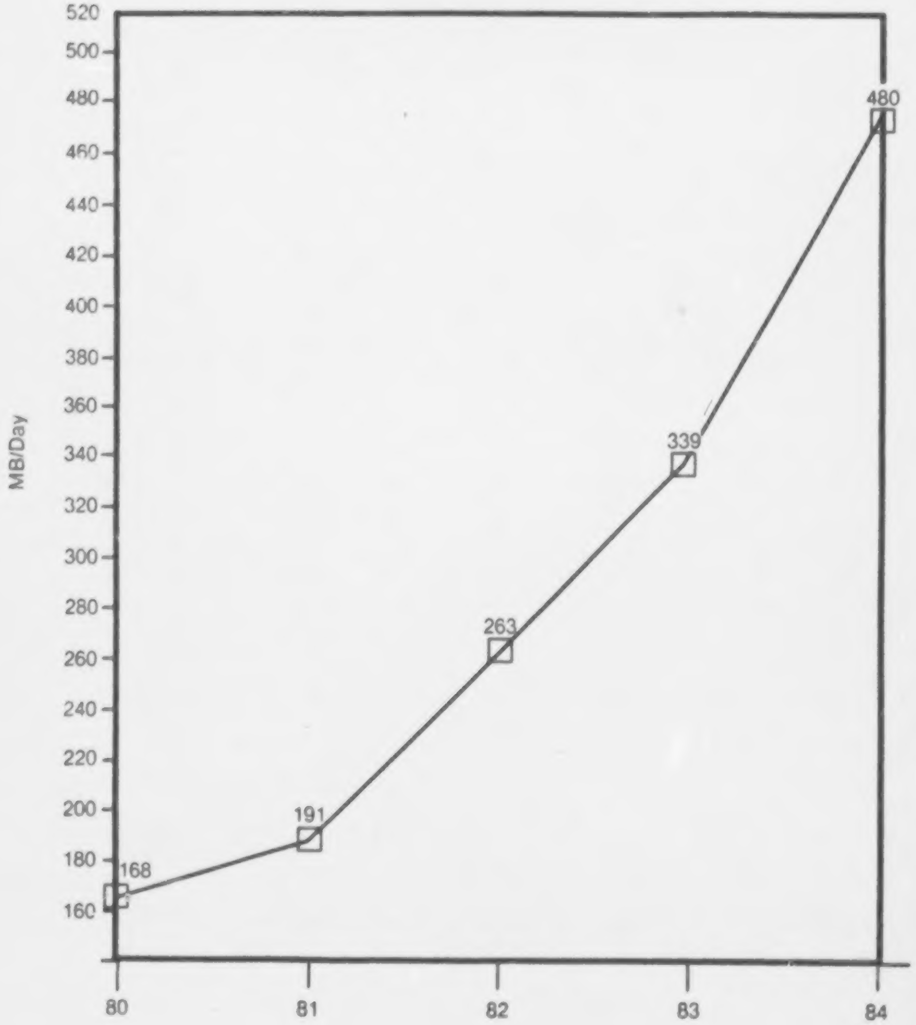
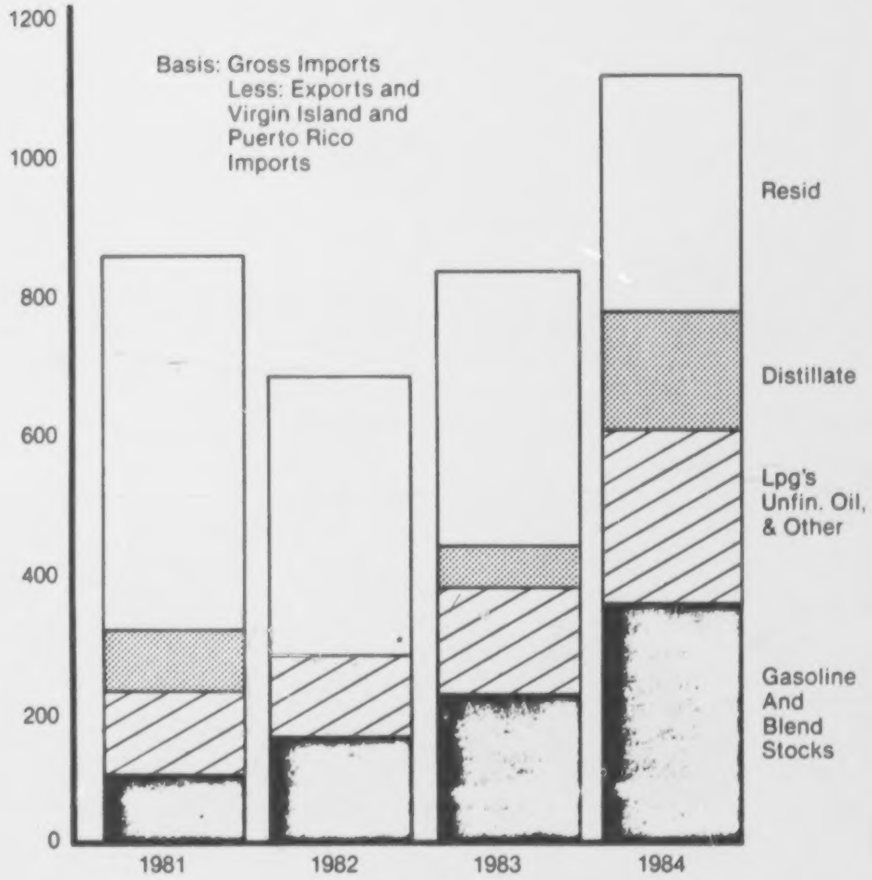


CHART 9

Net
U.S. Petroleum Product Imports

MB/Calendar Day



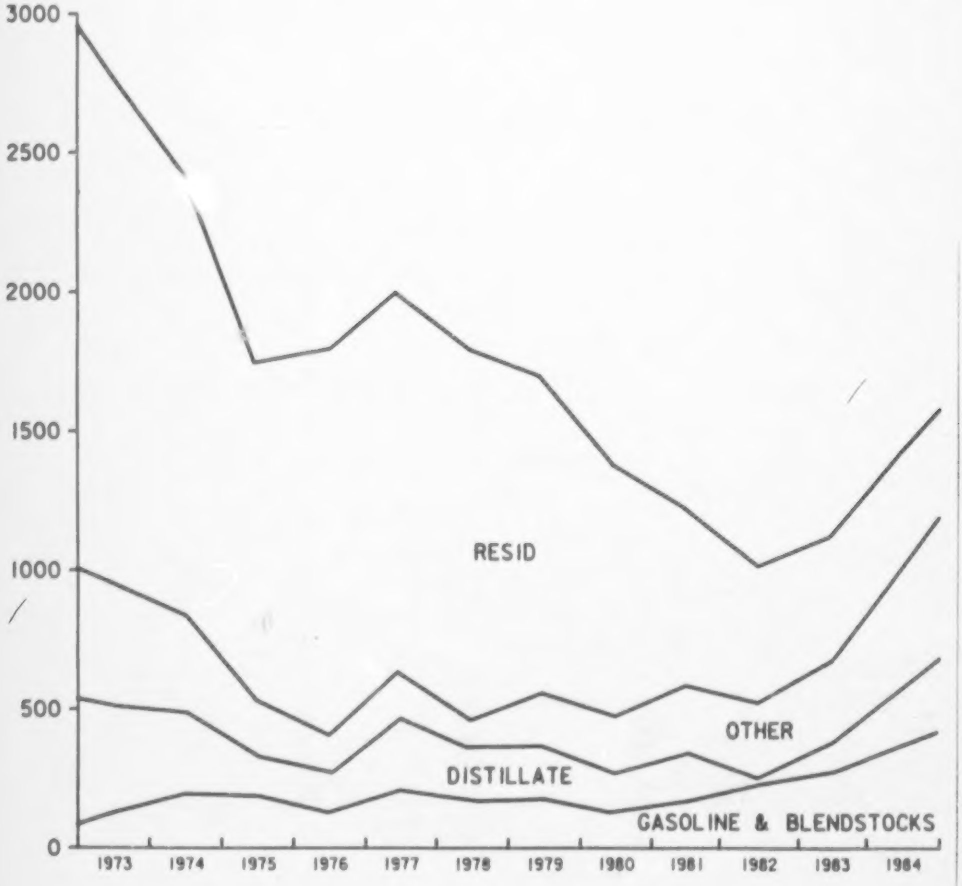
*Net Dist.
Export
Of 40

Source: DOE/EIA
By: COH 3/28/85

CHART 10

NET REFINED PRODUCTS IMPORTS

(THOUSAND BARRELS PER DAY)



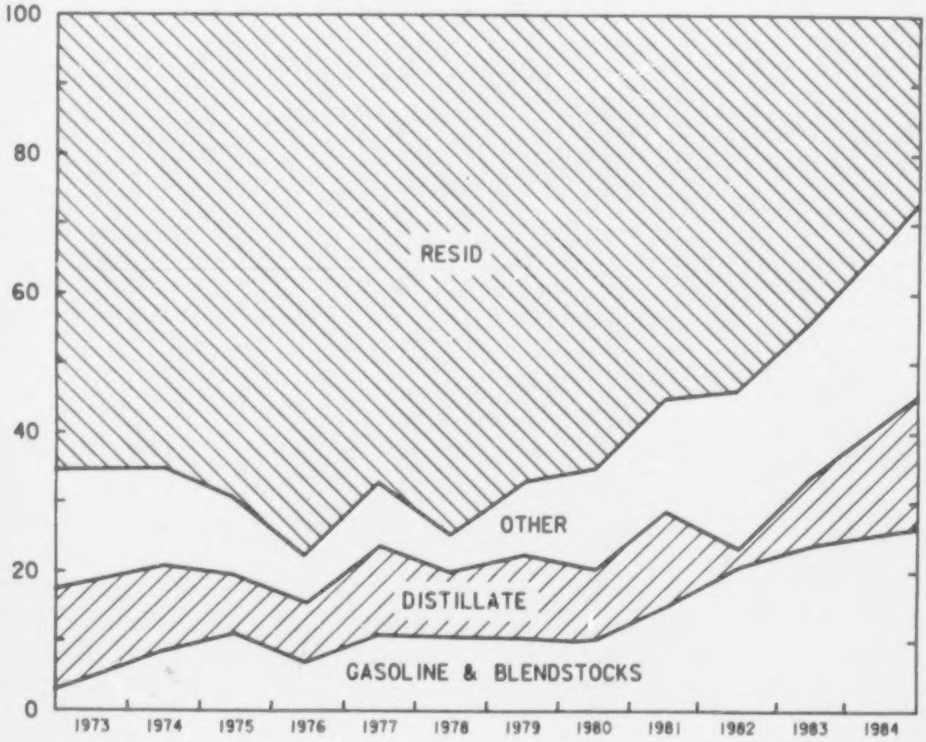
MPORTS

SOURCE: DOE/EIA, MONTI
ENERGY REVIEW

CHART 11

COMPOSITION OF NET REFINED PRODUCT IMPORTS

(PERCENT)



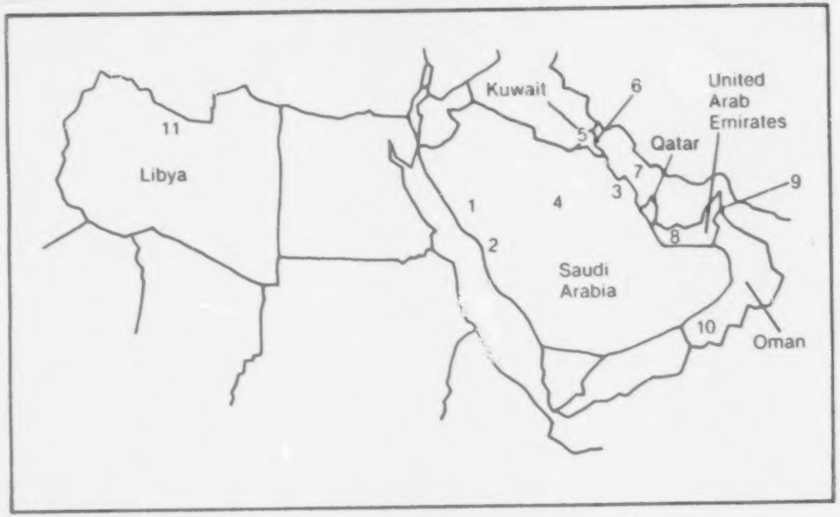
IMPORTS

SOURCE: DOE/EIA, MONTH
ENERGY REVIEW

1

CHART 12

Major Export Refinery Projects


Libya
11
Kuwait
6
5
United Arab Emirates
Qatar
7
3
9
1
4
2
8
Saudi Arabia
10
Oman

1 Yanbu
250,000 B/D
1984

2 Rabigh
325,000 B/D
1986

3 Jubail
270,000 B/D
1985

4 Buraidah
160,000 B/D
1987

5 Mina Abdulla
156,250 B/D
1986

6 Mina Al Ahmadi
170,000 B/D
1984
100,000 B/D
1986

7 UMM Said II
50,000 B/D
1984

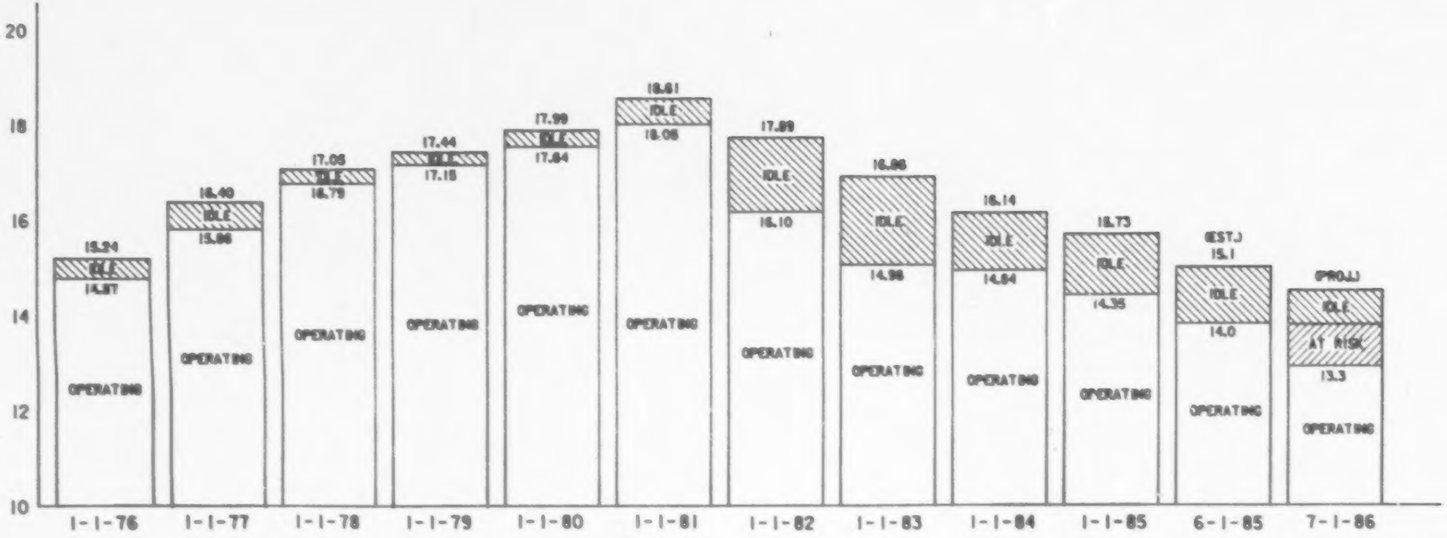
8 Ruwais II
185,000 B/D
uncertain

9 Ajman
171,000 B/D
1987

10 Salalah
200,000 B/D
uncertain

11 Ras Lunuf
228,000
1986

U.S. REFINING CAPACITY
(MILLION BARRELS PER CALENDAR DAY)



SOURCE: DOE/EIA, O&GJ, IRC
BY: COH 6/01/85

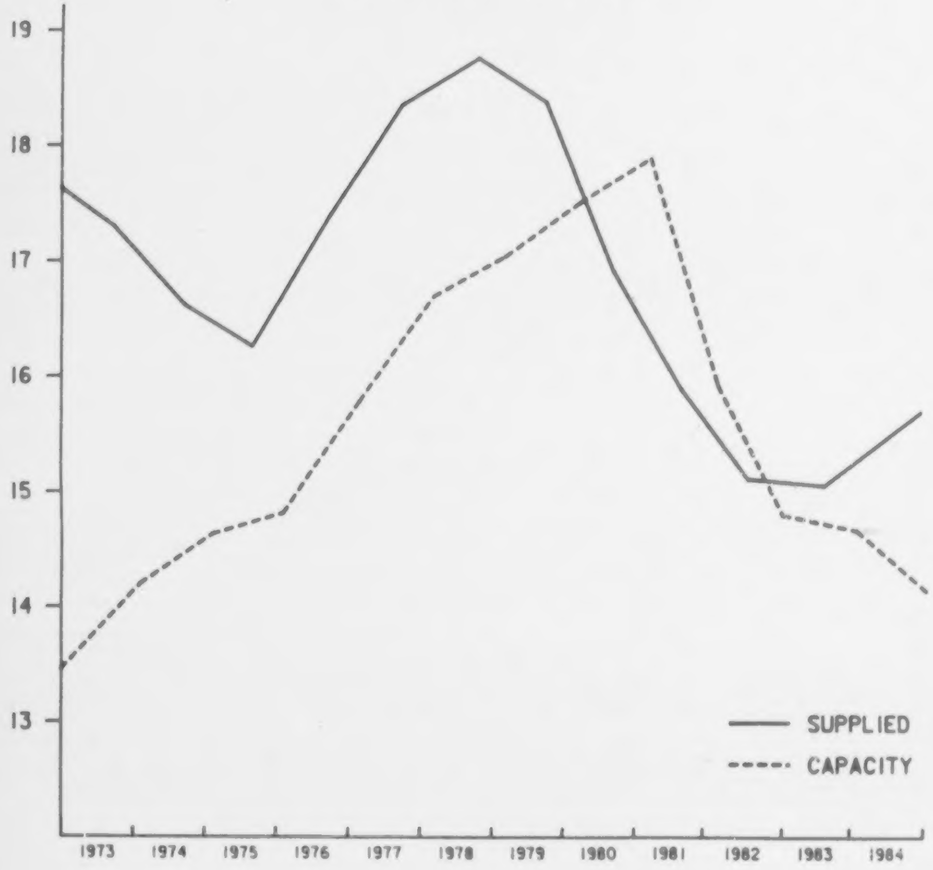
IMPORTS

CHART 13

CHART 14

PETROLEUM PRODUCTS SUPPLIED
VS
OPERATING REFINING CAPACITY

(MILLION BARRELS PER DAY)



MPORTS

SOURCE: DOE/EIA, MON

CHART 15

United States
Refinery Shutdown Since 1/01/84

Source	Refiner Idled or Closed Since in 1/1/84	Location	Crude Capacity MBCD	DOWNSTREAM CAPACITY Gasoline Reformers MBSD	Cat Crackers MBSD	Hydro Crackers MBSD	Vis Breakers MBSD	Cokers MBSD	Hydro Treaters MBSD	Other MBSD
DOE	Warrior Asphalt Co.	Holt, AL.	4.0	-	-	-	-	-	-	5.0
OGJ	Pester	Eldorado, KS.	33.3	5.7	14.9	-	-	-	5.5	17.9
OGJ	Allied Materials	Stroud, OK.	7.6	-	-	-	-	-	-	6.6
OGJ	Oklahoma Ref.	Cyril, OK.	12.7	4.0	7.5	-	-	-	2.0	5.0
OGJ	Oklahoma Ref.	Thomas, OK.	8.8	-	-	-	-	-	-	-
DOE,OGJ	Tonkawa	Arnett, OK.	12.0	-	6.0	-	-	-	-	-
DOE,OGJ	Dorchester	Mt. Pleasant, TX.	26.5	3.5	9.6	-	-	-	9.5	25.2
DOE,OGJ	Quintana	Corpus Christi, TX.	33.3	18.0	-	10.0	-	-	18.0	13.5
OGJ	Eddy	Houston, TX.	3.3	-	-	-	-	-	-	-
DOE,OGJ	Flint Chemical Co.	San Antonio, TX.	1.5	-	-	-	-	-	-	-
DOE,OGJ	Tesoro	Carrizo Springs, TX.	26.1	3.5	-	-	-	-	-	-
Platts	Texaco*	Port Arthur, TX.	139.0	-	-	-	-	-	-	-
Platts	Texaco	Amarillo, TX.	20.0	5.0	8.0	-	-	4.0	5.0	1.5
Platts	Texaco	Lawrenceville, IL.	54.0	24.0	34.0	-	-	-	41.0	34.3
Platts	Southland*	Lake Charles, LA.	157.8	-	-	-	-	-	-	-
DOE,OGJ	Southern Union	Lovington, NM.	36.1	-	-	-	-	-	8.5	11.5
OGJ	Thriftway	Bloomfield, NM.	6.1	-	-	-	-	-	-	-
OGJ	IVEC	Bakersfield, CA.	27.0	-	-	-	-	12.0	-	23.5
DOE,OGJ	Marlex	Longbeach, CA.	-21.1	-	-	-	-	-	-	-
OGJ	Pacific Oasis	Paramount, CA.	32.0	11.5	-	-	-	-	28.5	43.0
DOE,OGJ	Powerine	Sante Fe Springs, CA.	44.1	8.0	11.5	7.7	-	10.0	39.4	30.6
OGJ	USA	Ventura, CA.	24.0	7.0	-	-	-	-	-	-
Chap. 11	Fletcher	Carson, CA.	29.5	4.2	9.5	-	-	-	10.0	-
OGJ	Golden Eagle	Carson, CA.	16.2	-	-	-	-	-	-	-
OGJ	Sunland	Bakersfield, CA.	12.0	-	-	-	-	-	-	-
	Gary Western	Fruita, CO.	13.1	3.4	-	6.0	-	4.0	3.4	10.0
	Total Idled or Closed Since 1/1/84		791.1	97.8	101.0	23.7	-	30.0	170.8	227.6

Operating on 1/1/84**	14,837.6
Operating as of 05/01/85	14,046.5

*Partial shutdown, downstream capacity reduction unknown

**DOE/EIA U.S. Refining Capacity:1984

CHART 16

U.S. Refinery Operating Capacity and Utilization

1950 to Present

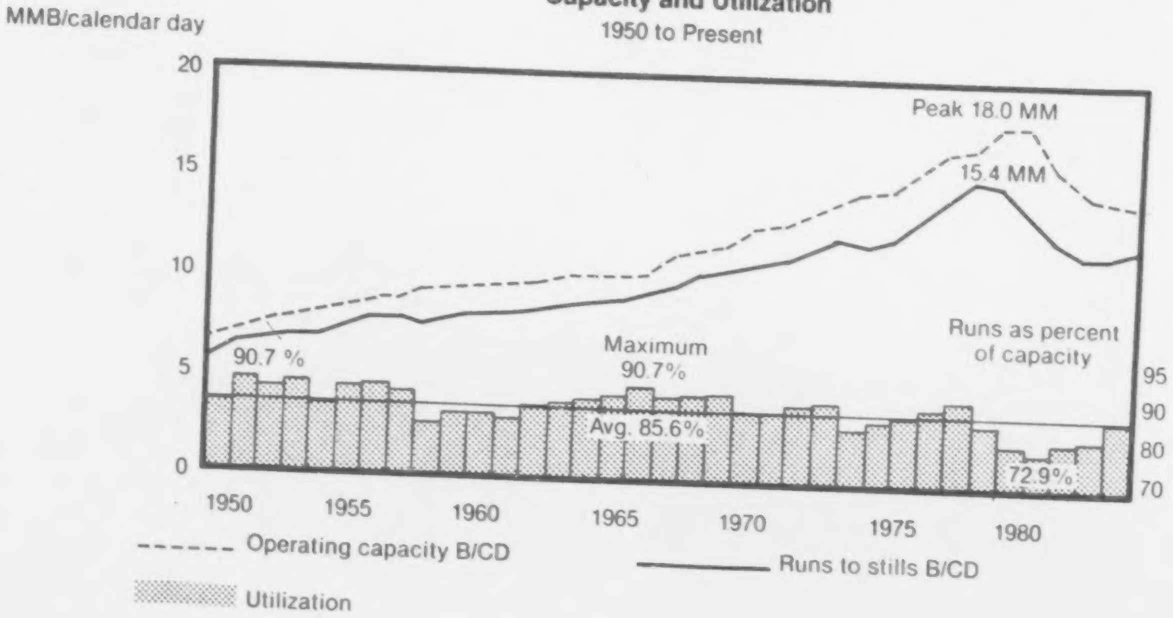


CHART 17

U.S. REFINING CAPACITY REQUIREMENTS

	Million Barrels Per Day	
	1983[1]	1984[2]
Total "Oil" Consumption	15.39	15.71
Less: NGL's Consumed Directly	1.62	1.58
Net NGL's Blended in Refineries	0.13	0.13
Intermediate and Blending Components	0.50	0.59
Processing Gain	0.49	0.56
Required Crude Distillation Capacity 100% Utilization, Zero Finished Product Imports	12.65	12.85
Required Calendar Day Refining Capacity:		
@ 90% utilization	14.0	14.3
@ 85% utililzation	14.9	15.1

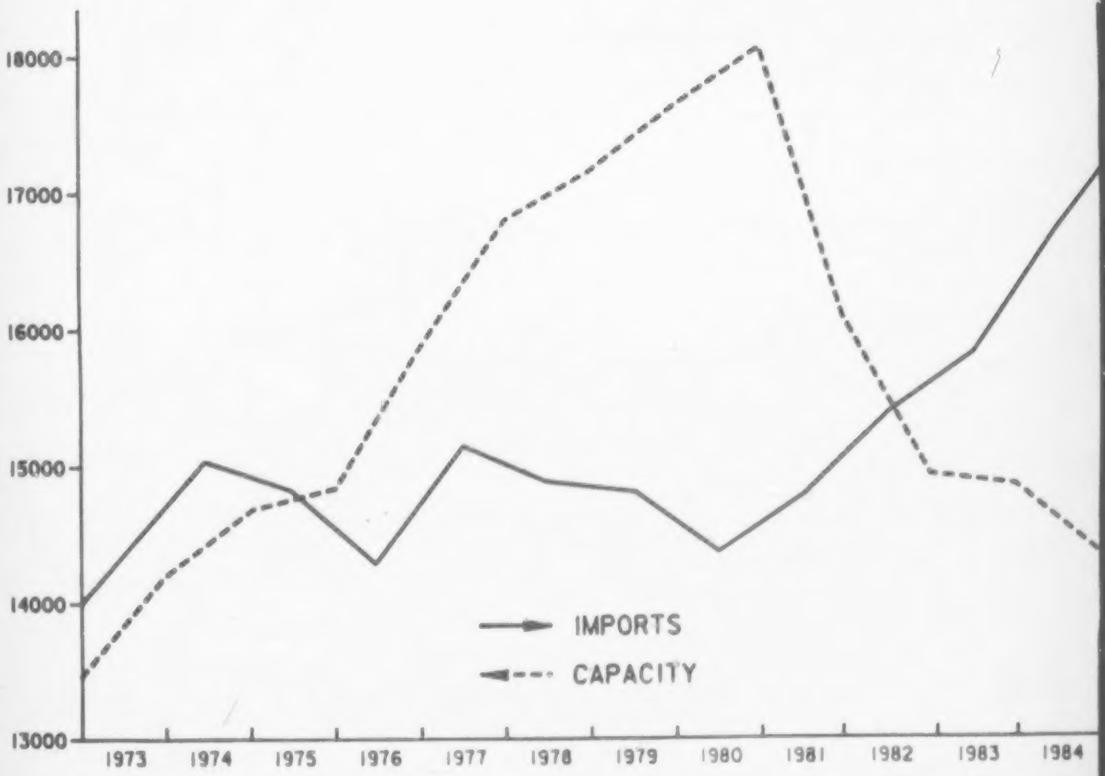
(1)"The Changing Structure of World Refining Industry: Implications for U.S. Energy Security," Fereidun Fesharaki and David Isaak, OPEC Downstream Project, East-West Center, presented to DOE January 23, 1985.

(2)DOE/EIA Petroleum Supply Monthly.

CHART 18

OPERATING REFINING CAPACITY VS GASOLINE IMPORTS

(THOUSAND BARRELS PER DAY)



SOURCE: DOE/

CHART 19

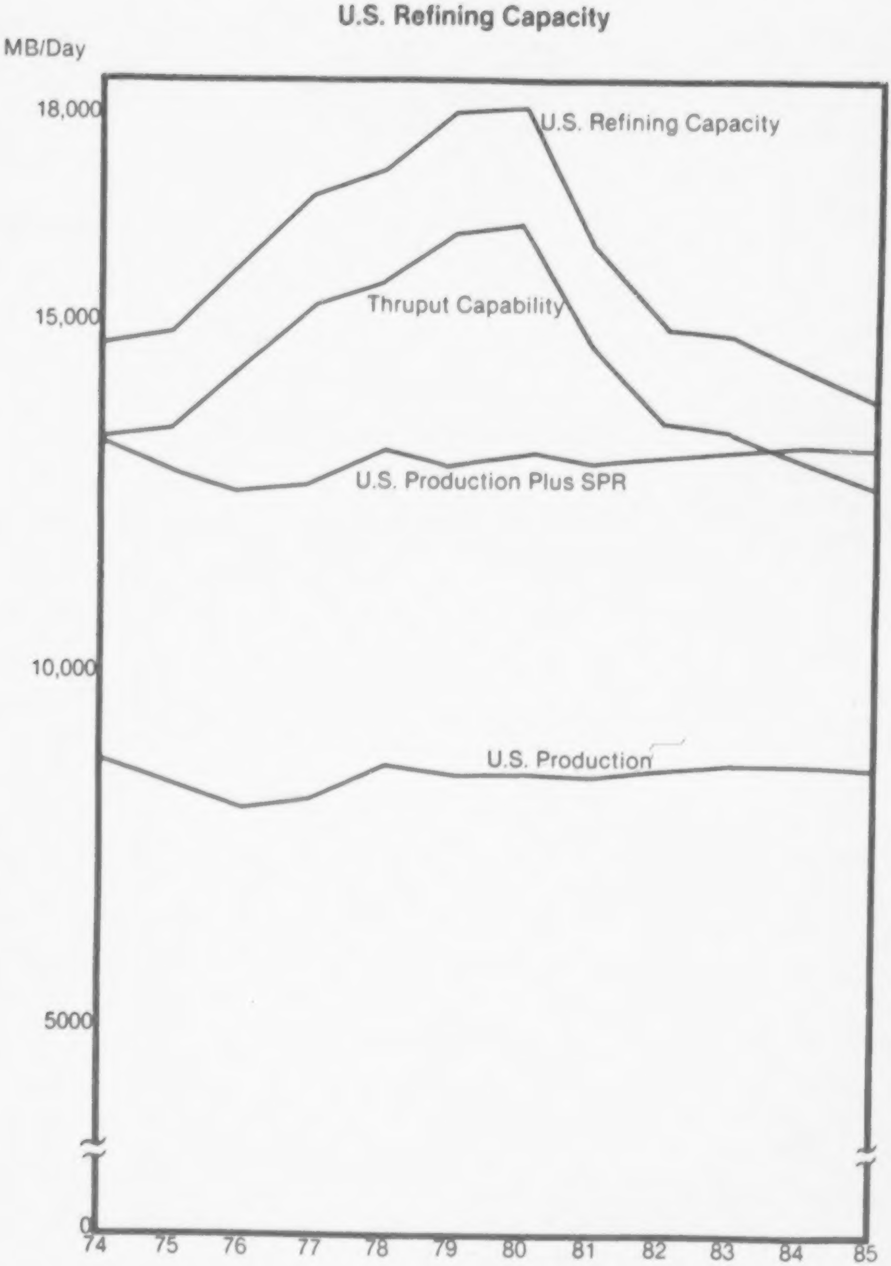

U.S. Refining Capacity
MB/Day
18,000
15,000
10,000
5000
0
74
75
76
77
78
79
80
81
82
83
84
85
U.S. Refining Capacity
Thruput Capability
U.S. Production Plus SPR
U.S. Production

CHART 20

REFINERY CAPACITY REQUIRED TO PROCESS SPR WITHDRAWALS(1)

(MMBCD)

Assumed SPR Withdrawal Rate	2.3	2.7	3.4	4.5
Domestic Crude Oil Production	8.757	8.757	8.757	8.757
NGL's in Refinery Input	.499	.499	.499	.499
Domestic Production to Refineries	9.256	9.256	9.256	9.256
SPR Withdrawal Rate	2.3	2.7	3.4	4.5
Average Capacity Needed:				
@ 100% Utilization Rate	11.556	11.956	12.656	13.756
@ 90% Utilization Rate	12.8	13.3	14.0	15.3
@ 85% Utilization Rate	13.6	14.0	14.9	16.2
DOE Operating Capacity 1/1/84	14.8	14.8	14.8	14.8
Shutdowns Since 1/1/84	0.8	0.8	0.8	0.8
Current Operating Capacity 5/1/85(2)	14.0	14.0	14.0	14.0
Additional Refining Capacity Required @ 90%	(1.2)	(0.7)	0.0	1.3
Additional Refining Capacity Required @ 85%	(0.4)	0.0	0.9	2.2

(1) Based on DOE/EIA's 1984 Petroleum Balances.

(2) Numbers do not subtract due to individual rounding.

CHART 21

MILITARY FUEL CONSUMPTION*
(thousand barrels)

	1984	1983	1982
Propane	20	5	7
Motor Gasoline	4820	5132	5338
Gasohol	27	39	41
Aviation Gasoline	268	397	595
Total Gasoline	5115	5568	5974
JP4	94614	97179	95771
JP5	20595	21451	22347
JP8	3828	3514	3942
Total Jet Fuel	119037	122144	122060
Distillate	37069	34866	36632
Fuel Oil	11774	11952	13753
Residual Fuel Oil	5187	5121	4726
Reclaimed Fuel Oil	110	29	30
Total Fuel Oil	17071	17102	18509
Total	178312	179685	183182
Total MBCD	487	492	502

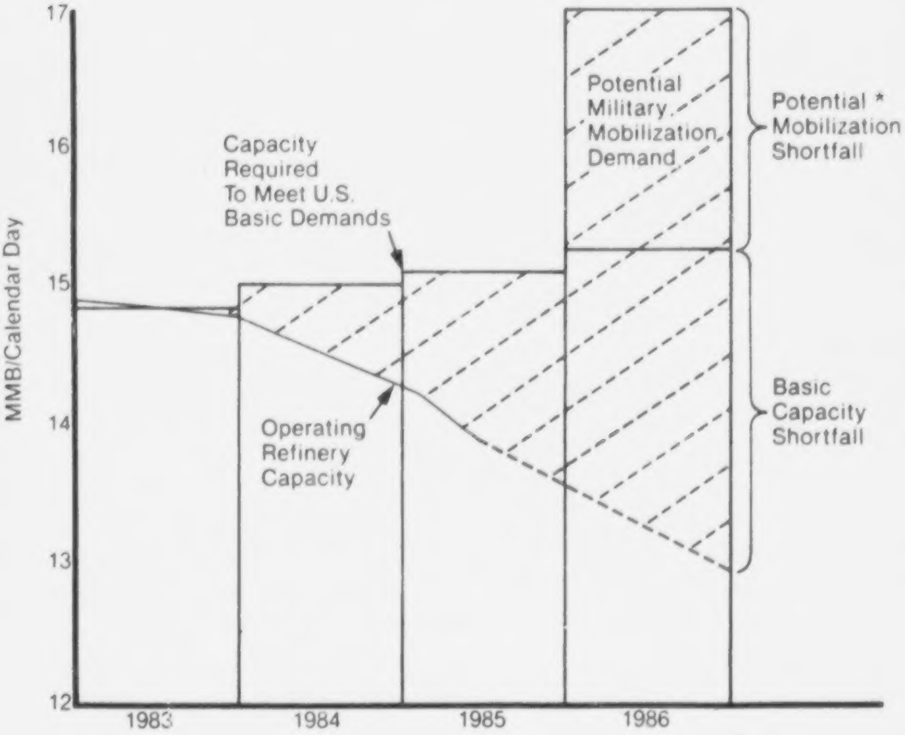
Source: Defense Fuel Supply Center

*Includes fuels for Army, Navy, Air Force, Marines, the Defense Logistics Agency and other Department of Defense agencies.

NOTE: According to Jeff Jones, Deputy Director of Energy Programs in the Office of the Secretary of Defense, at the April 1, 1985 hearing before the Environment, Energy, and Natural Resources Subcommittee of the House Committee on Government Operations. The volume would quadruple to 2 million barrels per day overnight in the event of a mobilization.

CHART 22

Required Refining Capacity
Vs.
Available Capacity



* Some of the projected shortfall would in fact be met by curtailment of civilian consumption.

APPENDIX A

MEMBERS OF THE INDEPENDENT REFINERS COALITION

Amber Refining, Inc.

American Independent Refiners Association

Apex Oil Company

Ashland Oil Company

Coastal Corporation, The

Crown Central Petroleum Corporation

Diamond Shamrock Corporation

Golden West Refining Company

Indiana Farm Bureau Cooperative Association, Inc.

Macmillan Ring-Free Oil Company, Inc.

National Cooperative Refinery Association

Paramount Petroleum Corporation

Placid Refining Company

Pride Refining, Inc.

Rock Island Refining Corporation

Tesoro Petroleum Corporation

Texas City Refining, Inc.

Tosco Corporation

Valero Energy Corp./Saber Energy, Inc.

CAPACITY OF MEMBERS OF THE INDEPENDENT REFINERS COALITION

Member of IRC Only	Total Crude(1) Distillation Capacity MBCD	Operating Crude(1) Distillation Capacity MBCD	Downstream(2) Processing Capacity MBCD
Apex Oil Company	104,500	104,500	251,500
Ashland Oil Company	462,943	353,343	1,076,000
The Coastal Corporation	171,300	171,300	312,000
Crown Central Petroleum Corp.	100,000	100,000	189,500
Diamond Shamrock Corporation	116,800	116,800	211,840
Indiana Farm Bureau Co-op.	21,200	21,200	21,600
Paramount Petroleum Corp.	46,500	32,000	83,000
Placid Refining Company	45,000	45,000	54,200
Pride Refining, Inc.	42,750	42,750	14,500
Rock Island Refining Corp.	43,200	43,200	75,000
Tesoro Petroleum Corp.	74,600	74,600	23,000
Texas City Refining, Inc.	119,600	119,600	189,200
Member of Both IRC and AIRA			
E-Z Serve Inc. Amber Refining Co.	20,000	20,000	19,000
Golden West Refining Company	42,000	42,000	101,300
MacMillan Ring-Free Oil Co. Inc.	16,880	15,600	7,650
National Co-op. Refinery Assn.	54,000	54,000	95,500
Tosco Corporation	258,800	164,500	578,100
Valero Energy Corp./ Saber Refining Co.	-0-	-0-	138,300
Member of AIRA Only			
Asamera Oil (U.S.), Inc.	26,000	26,000	48,000
Beacon Oil Company	17,300	17,300	11,730
Edgington Oil Company, Inc.	22,880	22,880	36,600
Fletcher Oil & Refining Co.	29,500	29,500	23,650
Holly Corporation	29,930	29,930	49,400
Huntway Refining Company	4,750	4,750	5,000
Newhall Refining Company, Inc.	21,400	21,400	22,000
Oxnard Refinery	4,000	4,000	2,500
Southland Oil Company	16,800	16,800	15,695
Sunland Refining Corporation	12,000	12,000	-0-
U.S. Oil & Refining, Inc.	25,000	25,000	41,500
Young Refining Corporation	12,400	12,400	7,316
	1,962,033	1,742,353	3,704,681

Source: DOE/EIA U.S. Refining Capacity: 1984

(1) As of 1/1/84

(2) Includes: vacuum distillation, thermal operation, catalytic cracking (fresh), catalytic reforming, catalytic hydrocracking, catalytic hydrotreating, alkylation, asphalt, aromatic isomerization, lubricating oils.

REV:COH 4/22/85

APPENDIX B

THE WASHINGTON POST, January 17, 1985

Oil Firm's Bid to Import Gasoline Into Japan Fails

By John Burgess
Washington Post Foreign Service

TOKYO, Jan. 16—A maverick Japanese oil company has failed in an attempt to break a long-standing informal ban on importing gasoline into Japan, but says it will try again soon.

Lions Petroleum Co. brought a tanker carrying 800,000 gallons of premium gasoline refined in Singapore to Kobe in December, intending to price it below domestic brands at neighborhood filling stations.

But following pressure from the company's bank and the Ministry of International Trade and Industry (MITI), it abandoned the plan and sold the shipment to a refinery for reprocessing, according to company President Taiji Sato.

MITI contends that the cheap fuel could have helped disrupt price stability in a strategic commodity and put further pressure on Japan's seriously ailing refining industry.

Last year, the government went on record favoring the liberalization of petroleum product imports, officials say, but wants it to come slowly to assure stability during the transition.

But Sato rejects these arguments. "If I can get financial support, I'm willing to try it again," he said. "If I had a sponsor, an American bank, for instance, I would be ready to proceed." He said he planned to return to Singapore later this month to negotiate another purchase.

Sato's move, which he said he planned for 18 months, is highly unusual in Japan, where large and small companies alike generally play according to rules set by gentleman's agreement and government guidance.

Today, the action drew condemnation from the Petroleum Association of Japan, which links the country's 29 oil refining companies. Its president, Yasuoki Takeuchi, told a press conference that any imports should be handled by association members, not outsiders like Lions.

Sato's attempt also has drawn attention to the strict controls and protection that Japan maintains for some industries that are not internationally competitive, despite much-publicized steps toward liberalization of imports in recent years.

Japanese consumer spokesmen, meanwhile, have criticized the government for blocking the introduction of lower-cost gasoline.

Sato said that the lower prices charged by the Singapore refinery would have allowed him to sell the fuel to motorists in Japan for about 10 cents per gallon cheaper than domestic gasoline.

With virtually no oil resources of its own, Japan imports about 4 million barrels of petroleum per day. Eighty percent of it is crude oil. Refined products that are allowed in center on naphtha and fuel oil.

Japan's highly mobile society consumes about 9 billion gallons of gasoline per year, all of it refined in Japan. There is no formal ban on imports, but because of "administrative guidance" from MITI and consensus within the industry, none come in.

Japan invested heavily in refineries in the 1970s. But the two oil shocks of the decade left it with much idle capacity. Many of the 29 refining companies are ailing badly, with government encouraging mergers to create units that are more viable financially.

Domestic prices are not formally controlled. But an elaborate structure has emerged in which prices remain stable, with gasoline selling at a comparatively high price to allow cheap prices for kerosene, an important home-heating fuel here.

Meanwhile, Japan has come under fire from the International Energy Agency for the product import controls. During a visit to Tokyo earlier this month, IEA Executive Director Helga Steeg stressed the need for freer flow. However, Foreign Ministry officials say she did not specifically comment on the Lions case.

APPENDIX C

AKIN, GUMP, STRAUSS, HAUER & FELD
ATTORNEYS AT LAW
SUITE 400
1333 NEW HAMPSHIRE AVENUE, N.W.
WASHINGTON, D.C. 20036
202 887 4000

MEMORANDUM

TO: Independent Refiners Coalition

RE: Legal Impediments To Obtaining Relief Under The U.S. Antidumping And Countervailing Duty Laws

DATE: May 8, 1985

As reflected in our earlier discussions and analyses, we believe that it would be extremely difficult for the IRC to obtain meaningful relief from imports of cheaply-priced gasoline under the U.S. antidumping and countervailing duty laws. The principal reasons for this conclusion are that: (1) the U.S. unfair trade laws, as presently constructed, do not adequately remedy the injurious effect on U.S. refiners of below-market pricing of crude oil in certain foreign countries and the resultant competitive benefit given to foreign refiners; and (2) the unfair trade laws do not adequately respond to the special case of Non-Market Economy (NME) countries. The general problems associated with crude input pricing and NME nations are discussed below.

I. CRUDE INPUT PRICING

The commercial viability of a refiner is determined largely by the difference between the cost of its crude oil input and the prevailing market price for refined products. When foreign governments transfer their domestic crude oil at a price level which is significantly below the world market price, this causes a severe commercial distortion in the refined products sector, since purchasers of this underpriced crude are encouraged to produce greater volumes of refined products and sell at non-economic price levels. U.S. refiners, who do not have access to this subsidized crude oil, find themselves at a severe competitive disadvantage. This difficulty in their ability to compete does not reflect the relative efficiencies of the U.S. and foreign refining operations, but is due solely to the large gap in the prices of crude oil which U.S. and certain foreign refiners must pay. This distortion, however, is not remediable under current antidumping or countervailing duty laws.

A. Antidumping Issues

Crude oil pricing becomes an issue only when the dumping calculation is based on constructed value as the foreign market value.[1] However, under current Departmental procedures it is unlikely that the Department would calculate a high foreign market value based on constructed value, because the major factor in the cost of gasoline is the cost of crude oil. The price of the crude oil input used in this modified cost of production calculation is likely to be far below the world market price. The result would be a constructed value of gasoline which is below prevailing market prices, thus leading to a finding of no dumping.

Imported gasoline is considered dumped to the extent that its U.S. price is below its foreign market value. Foreign market value is defined as home market prices, third country export prices or constructed value.[2] From the perspective of the

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[1] Constructed value is a modified cost of production calculation. In simple terms, constructed value is the cost of materials, labor and fabrication plus an amount equal to no less than 10 percent of the above for general, selling and administrative expenses plus a minimum of 8 percent of total costs for profits.

[2] Significant import relief cannot be expected if the Department were to perform a home market to U.S. price comparison. The home market prices of equivalent sales would have to be substantially higher in the foreign home markets for any significant dumping margins to be found. Surveys of home market prices in the countries under consideration have revealed gasoline prices in the United States to be, in general, substantially higher than those in the "home markets." This would lead to a finding of no dumping margins. The home market prices are lower in these countries because the prices net of tax are generally government-controlled and held artificially low for various social and economic reasons. Moreover, these lower home market prices also provide further economic incentive to these foreign refiners to produce for export.

Similarly, the chance of obtaining meaningful relief by comparing U.S. prices to prices of equivalent sales in another export market is small. The Department would choose a third country market most similar in volume and product characteristics to the U.S. The large volume, non-U.S. export markets have prices comparable to those in the U.S. The high priced gasoline markets (i.e., South Korea and Finland) are not likely to be chosen as third country markets most similar to the U.S. because of their small volumes relative to U.S. market volumes.

Department of Commerce, constructed value is the least preferred method of defining foreign market value, and will only be used if home market or third country prices are judged unsuitable. The Department generally can only be persuaded to use this approach if nearly all home market and export sales are made at prices below the fully allocated cost of producing gasoline.

The price of crude used in the constructed value calculation is likely to reflect one of the following three commercial situations: (1) the foreign refiner purchases crude in an open, unregulated market at a price approximating the world market price. (This is analogous to many U.S. refiners); (2) the foreign refiner purchases crude in its domestic market at a low, government-controlled price or directly from a state-owned crude producer at below world market prices; (3) the foreign refiner is related to the foreign crude producer and receives its crude at a transfer price which is below the world market price.

In the first case, the price for crude used in calculating that refiner's cost of producing gasoline would be the unregulated market price. Since the refiner's other costs are likely to be quite similar to those experienced by American refiners, the resultant cost of production should be close to the U.S. cost experience. Assuming that this foreign refiner is not substantially more efficient then its U.S. counterpart, it is likely that current home market and third country prices would be below its cost of production. In this case, it's probable that there would be dumping margins found.

However, refiners who are paying world market prices for their crude are not likely to be flooding the U.S. market with below-cost gasoline. We believe that the second and third types of commercial situations predominate in those countries primarily responsible for the recent, rapid rise in refined product imports. In the second situation, where the foreign refiner is purchasing crude in its domestic market at an artificially low price, the Department is likely to use this price in a cost of production calculation as long as it is widely available. This would lead to a calculation of a low-constructed value and a finding of no dumping.

In the third situation where the foreign refiner is related to the foreign crude producer, the crude input would be valued at the cost of recovery of the crude oil. In this case, the result is also a low-constructed value calculation and a finding of no dumping. In our opinion, this is the most common situation in the countries under consideration here.

B. Countervailing Duty Issues

A refiner who receives crude oil at below market prices benefits from a substantial subsidy. However, under current law, such a subsidy is not necessarily countervailable. The Commerce Department is likely to view this as a case concerning "upstream subsidies." Upstream subsidies have been investigated in past cases, all with negative findings. Even in cases where the input's transfer price was well below a world market price, the Department has failed to find countervailable subsidies on the grounds that the low prices were "generally available."3/ Although upstream subsidies were addressed specifically in the Trade and Tariff Act of 1984, we do not believe that the chances of prevailing on this issue have been improved as a result.4/ Indeed, the Act adopted the concept previously utilized in those cases, and has applied an even more stringent initiation standard in recent cases.5/

In order to establish the existence of upstream subsidies, we would first have to show that producers or sellers of crude are subsidized. Such a showing would entail an exhaustive investigation into financial health, industrial structure and government support of the petroleum industry. While the foreign

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3/ One of the most notable cases was Ammonia from Mexico, which focused on subsidized natural gas. Although the input's transfer price was well below a world market price, the Department failed to find that countervailable subsidies were bestowed to ammonia producers on the ground that natural gas was purchased by a number of industries at the artificially low price. (Final Negative Countervailing Duty Determination Anhydrous and Aqua Ammonia from Mexico, 48 Fed. Reg. 28, 522 (1983).

4/ Under that Act, in order to prevail, it must be shown: (1) that a subsidy on an input has been bestowed by the government; (2) that the subsidy has conveyed a competitive benefit; and (3) that the value of the input is significant to overall production cost.

5/ The Department will initiate an investigation only if there are "reasonable grounds" to believe or suspect that upstream subsidies are being bestowed on a product. In Certain Ethyl Alcohol from Brazil, Investigation No. C-351-501, 50 Fed. Reg. 16727 (April 29, 1985), the Department interpreted that standard to impose a burden on petitioners, first, to quantify the amount of the upstream subsidy, and second, to specify how much of that subsidy is passed through to producers of the subject merchandise.

petroleum industry is often nationalized, government ownership alone is not sufficient to establish subsidization. It is only when governments purchase equity in or heavily lend to troubled companies that countervailable subsidies flow. Foregoing income by selling to nationals at prices below the world market level would normally not be considered evidence of a subsidy. Moreover, the Department believes that government-run enterprises need not be profitable - they need only collect sufficient revenues to offset long-term costs. Thus, establishing that foreign petroleum industries are subsidized would be problematic.

Even if it were possible to prove subsidization of the crude oil sector, it would be necessary to show that refiners receive a commercial benefit from these subsidies. According to the Trade and Tariff Act of 1984, a competitive benefit has been bestowed "when the price for the input product . . . is lower than the price that the manufacturer of the [exported] merchandise . . . would otherwise pay for the product from another seller in an arms-length transaction." The key to establishing commercial benefit is determining whether the transfer price is an arms-length price. If both related and unrelated refiners receive crude at the same price, the Department is likely to find the price to be arms-length. This is true even if the price is held artificially low by government price controls.6/

Finally, even if we were to demonstrate that crude oil was heavily subsidized, we would need to demonstrate that this subsidy was not generally available. The Department's current policy is that subsidies which are available to a number of industries are not countervailable. In our case, we can make the strong assertion that, since the refining sector is the dominant purchaser of crude oil, upstream subsidies passed to refiners through the low price of crude oil are not likely to be generally available. Therefore, we could argue that they should be countervailable. Still, the Department could disagree on this point and ultimately deny relief.

In summary, the upstream subsidies provision is not likely to provide meaningful relief in this case. The competitive benefit concept was a positive result of the Trade and Tariff Act of 1984, in that it implied a recognition that world market price is the appropriate benchmark for determining what constitutes a

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6/ This issue currently is under review in the ongoing countervailing duty investigation concerning ethanol from Brazil. If a country which holds the price of its domestic oil at below market prices also resells crude oil at low government-controlled prices, this could be construed as eliminating the commercial benefit.

subsidy. Nevertheless, this is the second step of the statutory test. The Act mandates an initial showing of the existence of a subsidy on an input. This test erects a barrier that may be insurmountable. Thus, although we may well be able to prove both that the industry is receiving subsidies which are not generally available and that the value of the subsidized crude input is significant, effective relief nonetheless is likely to be blocked.

II. NON-MARKET ECONOMY COUNTRIES

Non-market economy countries are exporting gasoline and other refined products in increasing quantities. Unfortunately, gaining relief from unfairly traded non-market economy products is a cumbersome process which can lead to an uncertain result. Therefore, we believe it is quite uncertain whether meaningful relief could be gained with respect to their imports as described below.

A. Antidumping Issues

Unfairly traded imports from NMEs are judged by a different standard of fair value from those of market economy countries. With respect to antidumping actions, internal prices or costs are considered unsuitable for determining foreign market value because they do not reflect market forces. For this reason, the Department selects a "surrogate" country and uses that country's price or production costs to represent foreign market value. The surrogate selection process is difficult, for a variety of reasons, and can lead to highly unpredictable results. Moreover, most any surrogate would reflect the distortions outlined above.[7] Thus any attempt to gain relief from NME gasoline imports would be problematic at best.

B. Countervailing Duty Issues

The Department has ruled that the countervailing duty law does not apply to merchandise from an NME. The Department has

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7/ Thus, for example, if Mexico were chosen as a surrogate for Rumania, the distortion caused by below market domestic crude oil input prices would, as noted, result in a low constructed value calculation. Price-to-price comparisons would be equally unlikely to lead to significant import relief, as discussed in Footnote 1 *infra*.

determined in the past that the lack of a market economy has rendered the concept of subsidization meaningless.[8] Therefore, there does not appear to be reasonable relief available to U.S. refiners from non-market economy imports.

8/ This issue is on appeal in Carbon Steel Wire Rod from Poland and Czechoslovakia, Final Negative Countervailing Duty Determination, 49 Fed. Reg. 19371, 19375 (May 7, 1984). But even if the issue is won on appeal, significant problems remain. Indeed, such a victory might not open a new avenue of relief for the domestic refiners. The gathering of the necessary data on NME subsidies is very difficult at best. Moreover, verification of these data could be a substantial problem, rendering the final outcome unpredictable.

Senator NICKLES. Thank you very much, Mr. Hall.
Mr. Rathburn.

STATEMENT OF PHILLIP J. RATHBURN, COMMERCIAL DIRECTOR, HYDROCARBONS AND ENERGY, DOW CHEMICAL USA, ON BEHALF OF PETROCHEMICAL ENERGY GROUP

Mr. RATHBURN. Thank you, Mr. Chairman and members of the Committee. My name is Phillip J. Rathburn. I am commercial director for Hydrocarbons and Energy for Dow Chemical USA. Today I appear on behalf of PEG, the Petrochemical Energy Group. My work at Dow includes finding here and overseas the petroleum product inputs for our plants at prices that will keep our products competitive in the United States and world markets.

PEG is concerned that certain kinds of government regulation of crude oil or petroleum products adopted to protect domestic refiners may make the U.S. petrochemical industry uncompetitive and make the many domestic industries from pharmaceuticals to automobiles, which are dependent on petrochemical products, unable to compete in the world markets. The diagram on the first page of my written statement describes the many industries we feel may be affected.

The petrochemical industry is already under strong pressure from foreign producers. Between 1980 and 1983 our industry's exports dropped by 10 percent, while petrochemical imports rose by more than 40 percent. Loss of markets at home and abroad to foreign competitors means loss of petrochemical industry jobs. This loss of jobs is felt most strongly in States with high concentration of petrochemical industry employment.

Kentucky, for example, which has the 12th highest ratio of petrochemical employees to total number of workers employed in the State, lost 1,000 petrochemical jobs from the year 1980 to 1983. New Jersey went from 32,000 petrochemical jobs down to 26,000 during the same period. Virginia lost 4,000 jobs, and Ohio lost 2,000 jobs.

Major new petrochemical facilities in Saudi Arabia and Kuwait presently coming on stream make future competition look even tougher. A study released last week by the International Trade Commission indicates these facilities, as well as petrochemical plants in some other resource-rich countries, have significant competitive advantages in U.S. and world markets, even if foreign governments do not adopt unfair export subsidies.

I am here today not to ask for protection, but to ask you not to increase the advantages of our foreign competitors by imposing Government regulation of U.S. markets. If you adopt crude oil or petroleum product import regulation by imposing quotas or fees, our industry's ability to compete will be very much in question. Whether an import quota or fee is imposed on crude oil and petroleum products or only on products, the economic effect would be substantially the same.

Such a limitation will raise the cost not only of imported oil and products, but also domestic crude oil and products, as the Congressional Budget Office study done this year predicts. The broad economic consequences of such increases are reviewed in my full statement.

Raising the price of crude oil and/or products in this country above that of the world market necessarily results in an increase in our industry's production costs, particularly the independent sector of our industry. Then foreign competitors, using world oil or lower-priced feedstocks can take our export markets and will have an added advantage in our domestic markets.

Also, U.S. industries downstream of us, which use domestic petrochemical products as their manufacturing inputs, will find that their costs increase, whether the product comes from the United States or abroad. This impact may be felt throughout the United States in higher prices for such diverse products as medicines, pharmaceuticals, textiles, paints and coatings, plastics, automobiles, fertilizers and pesticides, and a host of other consumer products.

The combined production value of the petrochemical and petrochemical-dependent industries in 1983 was some 31 percent of total U.S. manufacturing production. Our competitive viability is already under pressure from other government actions. Due to arbitrary reclassification of certain napthas, our feedstocks are being hit with prohibitive import duties.

The petrochemical industry also faces proposals for massive increases in its Superfund tax bills. It's foreign competitors face no similar tax from their governments. We believe the adverse impact of import quotas or fees on our competitive position and on that of the industries downstream of us is too high a price to pay for whatever possible benefits are claimed.

But even if you are prepared to accept these economic consequences, before adopting Federal regulation of crude oil and petroleum product imports you should consider the unhappy experience with such regulation in the recent past. In 1958, the mandatory oil import program imposed a quota on all oil imports. It would be difficult to describe briefly the elaborate bureaucracy it took to decide who got access to the so-called cheap foreign oil allowed in.

The system became one of subsidies, politics, and indirect price controls on domestic oil. Petrochemical companies eventually obtained access to the right to import foreign oil in order to bring their own costs closer to prices paid by domestic and foreign competitors and obtain the ability to import oil to manufacture export products in an effort to keep foreign markets.

The results for our industry are detailed in my full statement. Briefly, in the late 1950's the U.S. share of world chemical exports was 23 percent. After the mandatory oil program was instituted, we faced high feedstock costs in the United States and depressed crude oil and naptha prices in world markets. It became cheaper to produce petrochemicals in Europe and Japan. New investment was made in Europe and Japan.

From 1958 through 1970, European and Japanese chemical investments were 50 to 100 percent higher than in the United States. In 1972, European sales of chemicals exceeded U.S. sales for the first time. In the same year the U.S. share of world chemical exports fell to 14 percent.

In summary, petroleum product import limitations are strong medicine. Those advocating these measures should be able to show a correspondingly strong need. The independent petrochemical industry joins many other industries in welcoming the termination of oil price and allocation controls, including the oil import program. It would be a drastic step backward into time and into reregulation of the energy and petrochemical industries to resurrect an import control program now.

This concludes my testimony. I'd be very happy to respond to questions at the appropriate time.

[The prepared statement of Mr. Rathburn follows:]

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Washington, D.C. 20006
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TESTIMONY OF

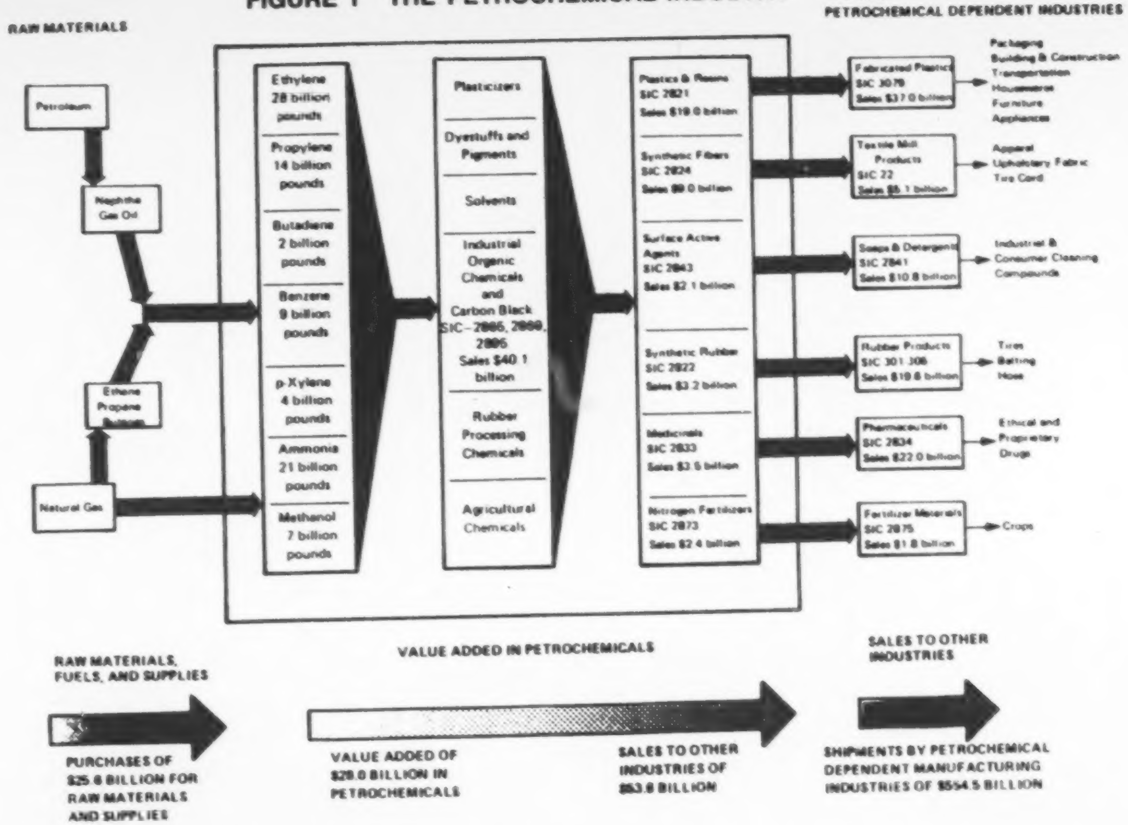
THE PETROCHEMICAL ENERGY GROUP

Subcommittee on Energy Regulation
and Conservation
Committee on Energy and
and Natural Resources
United States Senate

June 4, 1985

Washington, D.C.

FIGURE 1 THE PETROCHEMICAL INDUSTRY — 1983


RAW MATERIALS
Petroleum
Naphtha Gas Oil
Ethane Propane Butane
Natural Gas
Ethylene 28 billion pounds
Propylene 14 billion pounds
Butadiene 2 billion pounds
Benzene 9 billion pounds
p-Xylene 4 billion pounds
Ammonia 21 billion pounds
Methanol 7 billion pounds
Plasticizers
Dyestuffs and Pigments
Solvents
Industrial Organic Chemicals and Carbon Black SIC—2865, 2869, 2895 Sales $40.1 billion
Rubber Processing Chemicals
Agricultural Chemicals
Plastics & Resins SIC 2821 Sales $19.0 billion
Synthetic Fibers SIC 2824 Sales $9.0 billion
Surface Active Agents SIC 2843 Sales $2.1 billion
Synthetic Rubber SIC 2822 Sales $3.2 billion
Medicinals SIC 2833 Sales $3.5 billion
Nitrogen Fertilizers SIC 2873 Sales $2.4 billion
PETROCHEMICAL DEPENDENT INDUSTRIES
Fabricated Plastics SIC 3079 Sales $37.0 billion
Textile Mill Products SIC 22 Sales $5.1 billion
Soaps & Detergents SIC 2841 Sales $10.8 billion
Rubber Products SIC 301-306 Sales $19.6 billion
Pharmaceuticals SIC 2834 Sales $22.0 billion
Fertilizer Minerals SIC 2875 Sales $1.8 billion
Packaging
Building & Construction
Transportation
Housewares
Furniture
Appliances
Apparel
Upholstery Fabric
Tire Cord
Industrial & Consumer Cleaning Compounds
Tires
Belting
Hose
Ethical and Proprietary Drugs
Crops
RAW MATERIALS, FUELS, AND SUPPLIES
PURCHASES OF $25.6 BILLION FOR RAW MATERIALS AND SUPPLIES
VALUE ADDED IN PETROCHEMICALS
VALUE ADDED OF $29.0 BILLION IN PETROCHEMICALS
SALES TO OTHER INDUSTRIES OF $53.8 BILLION
SALES TO OTHER INDUSTRIES
SHIPMENTS BY PETROCHEMICAL DEPENDENT MANUFACTURING INDUSTRIES OF $554.5 BILLION

SOURCE: 1983 Petrochemical Industry Profile, Arthur D. Little, Inc., September 1, 1984.

EXECUTIVE SUMMARY

Government regulation of crude oil or petroleum product imports, adopted to protect domestic refiners, could make the U.S. petrochemical industry uncompetitive and the many industries, from pharmaceuticals to automobiles which are dependent on petrochemical products unable to compete in world markets.

- The petrochemical industry is already under strong pressure from foreign producers. Between 1980 and 1983 our exports dropped by 10 percent while petrochemical imports rose by more than 40 percent.
- Loss of markets at home and abroad to foreign competitors means loss of petrochemical industry jobs. For example, Kentucky lost a thousand petrochemical jobs from 1980 to 1983. New Jersey went from 32,000 petrochemical jobs to 26,000. Virginia lost 4,000 jobs. Ohio lost 2,000 jobs.
- Major new petrochemical facilities in Saudi Arabia and Kuwait have substantial competitive advantages over U.S. producers, according to a recently released study of the International Trade Commission.
- Our competitive viability is already under pressure from other government actions, e.g., certain feedstocks are being hit with prohibitive import duties; the industry also faces proposals for massive increases in its superfund tax bills.

Even if one is prepared to accept the adverse economic consequences, before adopting federal regulation of oil imports Congress should study the unhappy experience with such regulation in the recent past.

- In 1958 the Mandatory Oil Import Program imposed a quota on oil imports. The system became one of subsidies, politics and indirect price controls on domestic oil.
- In the late 1950's, the United States' share of world chemical exports was 23%. After the Mandatory Oil Import Program was instituted we faced high feedstock costs in the U.S. while crude oil and naphtha prices in world markets were depressed. It became cheaper to produce petrochemicals in Europe and Japan. From 1958 through 1970, European and Japanese investment in new plants was 50% to 100% higher than U.S. levels.

- As a consequence, by 1972, European sales of chemicals exceeded U.S. sales for the first time. The U.S. share of world chemical exports fell to 14%.

Petroleum product import limitations are strong medicine. Those advocating these measures should be able to show a correspondingly strong need. Our review of the evidence fails to reveal changes in import patterns that would warrant such a strong response at this time, though we agree that possible problems should be closely watched.

- In the most recent month for which data is available, April, 1985, API statistics show U.S. imports of crude oil down by 6 percent and imports of all petroleum products down by 18 percent compared to last April.
- In 1984, total gasoline and gasoline blending components averaged 370,000 B/D, or only 6 percent of the United States' total gasoline demand.
- In an April, 1985 study the ITC concluded that EPA's new rules reducing the lead content of gasoline will cause imports of gasoline containing lead to decline dramatically. Since nearly 60 percent of our gasoline is now unleaded, the EPA action may go a long way toward reducing current gasoline import levels.

TESTIMONY OF PHILLIP J. RATHBURN

My name is Phillip J. Rathburn, I am Commercial Director - Hydrocarbons and Energy for Dow Chemical U.S.A. Today I appear on behalf of PEG, the Petrochemical Energy Group. PEG is a group of independent petrochemical companies--those which are not vertically integrated with major refiners. Our companies are producers of petrochemical intermediate products such as ethylene, methanol and ammonia as well as of downstream products such as plastics, fibers, synthetic rubber, fertilizers and pharmaceuticals.

My own responsibilities include securing the petroleum products Dow consumes in its manufacturing plants as raw materials and energy at prices that will keep our products competitive in U.S. and world markets.

We are concerned that limitations on crude oil or petroleum product imports adopted to protect domestic refiners, will make uncompetitive the U.S. petrochemical industry and the many domestic industries, from pharmaceuticals to automobiles, which are dependent on petrochemical products. The diagram on the first page of my statement describes the many industries that will feel the effect if chemical prices are artificially increased by a quota or other limit on the petroleum products our industry uses as raw materials.

The Petrochemical Industry

The U.S. petrochemical industry is vital to the economic welfare of the United States, and is a key contributor to the nation's trade balance. U.S. petrochemical industry sales in 1984 are estimated at over $90 billion. 1/ The industry employed 364,000 people, 2/ and invested $4 billion in new plant and equipment in the U.S. 3/ The industry made a $7 billion positive contribution to the national balance of trade in 1983. 4/ Nevertheless, this represents a 23 percent decline from the U.S. petrochemical industry's positive balance of trade of $10.3 billion in 1980. 5/

Imposition of an artificial price increase on our petroleum raw materials would make us more vulnerable to foreign competition. Loss of markets at home and abroad to foreign competitors means loss of petrochemical industry jobs. This loss of jobs is felt most strongly in the states

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1/ United States Department of Commerce, 1985 Industrial Outlook, January, 1985, p.11-2.

2/ Arthur D. Little, Inc., 1983 Petrochemical Industry Profile, September 1, 1984 (hereinafter "1983 Petrochemical Industry Profile").

3/ Id.

4/ Trade Trends in Petrochemicals: 1983, A Report to the Petrochemical Energy Group, Arthur D. Little, Inc., August, 1984 (hereinafter "Trade Trends in Petrochemicals: 1983").

5/ Id.

with a high concentration of their employment in the petrochemical industry. Kentucky, for example, which has the twelfth highest ratio of petrochemical employees to the total number of workers employed in the state, lost a thousand petrochemical jobs from 1980 to 1983. New Jersey, ranked sixteenth, a large petrochemical producer, went from 32,000 petrochemical jobs to 26,000, a loss of 6,000 jobs. Virginia, another large producer, ranked eighteenth, lost 4,000 jobs. Another large petrochemical state, Ohio, lost 2,000 jobs. 6/

These employment declines, of course, correlate with loss of markets at home and abroad. Between 1980 and 1983 our industry's exports dropped by 10 percent while petrochemical imports rose by more than 40 percent.

U.S. producers' place in petrochemical world markets is becoming increasingly difficult to maintain. In particular, major petrochemical facilities in Saudi Arabia and Kuwait are presently coming on stream. Their output is targeted for export markets. 7/ A study released last week

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6/ Compare, Arthur D. Little, Inc., 1980 Petrochemical Industry Profile, August 1, 1981 with 1983 Petrochemical Industry Profile.

7/ The Probable Impact on the U.S. Petrochemical Industry of the Expanding Petrochemical Industries in the Conventional-Energy-Rich Nations, Final Report on Investigation No. 332-137 Under Section 332(b) of the Tariff Act of 1930, USITC Publication 1370, United States International Trade Commission, April 1983, pp. 63 and 86-7.

by the International Trade Commission indicates these facilities, as well as petrochemical plants in some other resource rich countries, have significant competitive advantages in U.S. and world markets, even if foreign governments do not adopt unfair export subsidies. 8/

We are not seeking protection for our chemical products. We will do everything we can to stay competitive. But we face an uphill battle. I am here today not to ask for protection, but to ask you not to increase the advantages of our foreign competitors by imposing government regulation of U.S. oil markets. If you adopt crude oil or petroleum product import regulation, by imposing quotas or fees, our industry's ability to compete will be very much in question.

The Impact of Import Fees or Quotas

Whether an import quota or fee is imposed on crude oil and petroleum products or only on products the economic effect would be substantially the same. Such a limitation on imports can be expected to raise the cost not only of imported oil and products, but also of domestic crude oil and products. Evidence of this, if any is needed, can be found in the studies done by the Congressional Budget Office

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8/ Potential Effects of Foreign Governments' Policies of Pricing Natural Resources, Final Report on Investigation No. 332-202 Under Section 332(b) of the Tariff Act of 1930, USTIC Publication 1696, United States International Trade Commission, May 1985.

(CBO) this year. CBO said that a $5.00 per barrel oil import fee would raise about $9 billion a year, 25% of which would come from the windfall profit tax, "since an import fee would allow the price of all domestically produced oil to increase, thereby increasing the windfall profit and tax on each barrel." 9/

The broad economic consequences of an oil import fee were described in a series of government and private studies in 1982. 10/ Those reports found that a $5 per barrel import tax on crude oil and petroleum products (equivalent to about 12 cents per gallon) would:

9/ Congressional Budget Office, Report to the Senate and House Committees on the Budget, *Reducing the Deficit: Spending and Revenue Options* at 239 (February 1985).

10/ *See* Energy Information Agency, *Memorandum, Economic Impacts of an Oil Import Fee*, (March 19, 1982) ("EIA Memorandum"); Gelb, Bernard A. and Hull, Everson W., Congressional Research Service, The Library of Congress, *Revenue and Macroeconomic Impacts of an Oil Import Tax: A Brief Review*, (April 6, 1982) (Gelb, CRS); Kumins, Larry, Congressional Research Service, The Library of Congress, *Background on Oil Import Fee Proposals: Some Policy and Economic Considerations*, (April 7, 1982); Congressional Budget Office, *Oil Import Tariffs: Alternative Scenarios and Their Effects*, Staff Working Paper, (April 1982) (CBO Staff Working Paper); Bodde, Dave, and Webre, Phillip, Natural Resources and Commerce Division, Congressional Budget Office, *Memorandum: Oil Import Fees*, (March 22, 1982); Consumer Energy Council of America Research Foundation, *A Comprehensive Analysis of the Impact of a Crude Oil Import Fee: Dismantling a Trojan Horse*, (April 1982) (CECA); Petroleum Industry Research Foundation (PIRF), *The Oil Import Fee Issue*, (April 19, 1982).

- Increase inflation 1.2 percentage points in the tax's first year; 11/
- Increase unemployment .3 to .5 percentage points; 12/
- Reduce real GNP by .4 to 1.4 percent. 13/

Raising the price of crude oil and/or products in this country above that of the world market necessarily results in an increase in the production costs of the domestic petrochemical industry, particularly the independent sector of that industry. Petrochemical feedstocks come predominantly from the tailgate of refineries and gas processing plants, and some petrochemical feedstocks are imported. The rise in the cost of feedstocks and fuels will further erode our ability to compete in several significant ways:

First, foreign competitors who face world oil price levels or, in some cases, lower than world prices for their raw materials, can erode our export trade.

Second, foreign competitors will have an added competitive advantage to use against us in our domestic markets.

11/ EIA Memorandum, Appendix.

12/ EIA Memorandum, Appendix; Gelb, CRS, Table 2, p.9; CECA, p.5 and Table 1, p.7.

13/ EIA Memorandum, Appendix; Gelb, CRS, Table 2, p.9; PIRF, p.6; CBO Staff Working Paper, Table 3, p.10; CECA, Table 1, p.7.

Third, U.S. industries which use domestic petrochemical products as their manufacturing inputs will find that their costs increase, whether the product comes from the U.S. or abroad, and this impact will be felt throughout the United States in higher prices for such diverse products as medicines, pharmaceuticals, textiles, paints and coatings, plastics, automobiles, fertilizers and pesticides, and a host of other consumer products. This, in turn, forces on these manufacturers of consumer goods the same problems that will face the petrochemical companies: less exports, more imports, loss of markets--with the resulting impacts on employment and balance of payments.

In a study completed in 1984, the consulting firm of Arthur D. Little, Inc. concluded that 1983 shipments of U.S. petrochemical-dependent industries amounted to a value of $567 billion. The combined production value of the petrochemical and petrochemical-dependent industries in 1983 was some 31 percent of total U.S. manufacturing production. 14/

Our competitive viability is already under pressure from other government actions. Certain of our feedstocks, due to arbitrary reclassification of certain naphthas, are being hit with prohibitive import duties. 15/

14/ 1983 Petrochemical Industry Profile, p. 32.

15/ Certain naphthas with minimal percentages of benzenoid [Footnote continued]

The petrochemical industry also faces proposals for massive increases in its superfund tax bills. Its foreign competitors face no similar tax from their governments. 16/ A recent Congressional Research Service (CRS) study 17/ concluded that the increased costs from one legislative proposal which would increase superfund feedstock taxes would result in reduced domestic production and employment whether or not the industry absorbed the

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[Footnote continued]
chemicals are being reclassified as chemical mixtures and tariffed as dutiable benzenoids. Our members report that as an economic matter these dutiable benzenoid chemicals are not being removed for separate use. These changes in administration of the tariff schedules appear to be the result of pressure from the U.S. refining industry to protect refiners against imports of gasoline and gasoline blending stocks. But an unintended side effect has been to increase the cost of some naphtha feedstock shipments for the petrochemical industry to such high levels that use of these imported naphthas are effectively denied U.S. petrochemical producers. See Testimony of R.J. Birdwell on Behalf of the Petrochemical Energy Group, before the International Trade Commission, Investigation No. 332-203, March 7, 1985. Legislation has been introduced regarding changes in classifications and we have proposed amendments which would correct this problem in particular (see attachment for proposed amendment to Anthony bill, H.R. 2354).

16/ Environmental Protection Agency, Office of Solid Waste and Emergency Response, Impact of CERCLA Taxes on the U.S. Balance of Trade, CERCLA Section 301(a)(1)(E) Study, p.2-1 (December 1984).

17/ Lazzari, Salvatore and Gelb, Bernard A., Congressional Research Service, The Library of Congress, Proposed Superfund Tax Increases and The U.S. Petrochemical Industry: An Economic Analysis, p.25-27 and 28-31 (a study based on H.R. 5640, passed by the House last year).

increased costs or passed them along in the form of higher prices. 18/

Historical Perspective

The adverse impact of import quotas or fees on our competitive position and on that of the industries downstream of us is too high a price to pay for whatever possible benefits are claimed. And oil import restrictions have a broad, adverse effect on the overall economy, as government studies cited in my testimony document. But in addition, the history of prior experience with oil import fees and quotas should be studied before you move in this direction.

Much of it is documented by "The Oil Import Question: A Report on the Relationship of Oil Imports to the National Security" by the Cabinet Task Force on Oil Import Control (February 1970). 19/ That report deals with the period where "cheap" foreign crude oil was the driving force. Perhaps one quote will suffice to make a point:

18/ Other current superfund proposals include H.R. 2022, which proposes a tax on feedstocks that would have virtually the same affect on the petrochemical industry as H.R. 5640; H.R. 2560, which proposes to raise $10.1 billion, as did H.R. 5640, but through unspecified levels of tax on feedstocks, waste, chemical imports and other unspecified taxes; S. 51, which was recently approved by the Senate Finance Committee and would not increase the existing feedstock tax.

19/ Cabinet Task Force on Oil Import Control, The Oil Import Question, A Report on the Relationship of Oil Imports to the National Security, (1970).

"Without import controls the domestic wellhead price would fall from $3.30 per barrel to about $2.00, which would correspond to the world price. Although we cannot exclude the possibility, we do not predict a substantial price rise in world oil markets over the coming decade." 20/

It would be difficult to describe briefly the elaborate bureaucracy it took to decide who got access to the cheap foreign oil and in what proportion, but a shorthand description would be that the system became one of subsidies, heavily influenced by political considerations, and a system of indirect price controls on domestic oil, since the levels of imports could be adjusted to offset or influence the allowables then set for production of oil in this country. Petrochemical companies also sought, and eventually obtained, access to the right to import foreign oil in order to bring their costs closer to the prices paid by domestic and foreign competitors and to obtain the ability to import oil to manufacture export products in an effort to keep foreign markets.

In the early seventies, the prediction on world oil prices of the Task Force went out of the window. Foreign oil prices escalated sharply. Almost overnight, the issue became not how to get access to cheap foreign oil, but how to get access to cheap domestic oil, if any oil at all.

20/ Id., p. 124.

The Congress passed the Emergency Petroleum Allocation Act of 1973 and subsequent amendments, drastically adding to a bureaucracy which overlay and incorporated the oil import program. The result was a nightmare of price and allocation controls, with the subsidy aspects of both domestic and foreign oil largely allocated through an "entitlements" program which still lives on in the Courts and before the Department of Energy.

In addition, empirical data indicates that an ominous long-term change in U.S. petrochemical producers' international market share followed from increasing by quotas and fees U.S. petrochemical feedstock costs above those of foreign producers. New investment in the petrochemical industry shifted to areas having access to cheaper petrochemical feedstocks and in due course world market share shifted as well.

In the late 1950's, the United States' share of world chemical exports was 23%. 21/ In 1958, the Mandatory Oil Import Program was instituted, and oil imports into the United States were restricted until 1973. With the imposition of oil import controls, U.S. crude oil producers were partially insulated from price competition. With high feedstock costs in the U.S., and depressed crude oil and

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21/ Trade Trends in Petrochemicals: 1983, A Report To The Petrochemical Energy Group, Arthur D. Little, Inc., August, 1984, pp. 18-19.

naphtha prices in world markets, it became cheaper to produce petrochemicals in Europe and Japan. This resulted in an extended period during which new investment was made in Europe and Japan beyond the needs of industry to meet local demands. From 1958 through 1970, European and Japanese chemical investments were 50% to 100% higher than U.S. levels, on the basis of investment per dollar of sales. 22/

This high level of investment lasted until 1971. In 1972, European sales of chemicals exceeded U.S. sales for the first time. 23/ In this same year, the U.S. share of world chemical exports fell to 14%. 24/

To summarize our historical experience with crude oil and petroleum product quotas and fees: (1) they generated an extensive, complex and inequitable governmental involvement in the producing, refining, and petrochemical industries; (2) they failed to prevent a growing U.S. dependence on foreign crude oil and refined products; (3) they forced capital investment in petrochemical facilities to be made outside the U.S. and subsequently the world

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22/ The Impact of Changing U.S. Feedstock and Energy Costs on the Petrochemical Industry and the Economy, A Report to The Petrochemical Energy Group, Arthur D. Little, Inc., April, 1981, pp. 5-14.

23/ Id.

24/ Trade Trends in Petrochemicals: 1983, supra, at p. 18.

market share of these foreign producers increased while U.S. market share declined.

Current Import Pressures

Petroleum product import limitations are strong medicine. Those advocating these measures should be able to show a correspondingly strong need. Our review of the evidence fails to reveal changes in import patterns that would warrant such a strong response at this time, though we agree that possible problems should be closely watched.

In 1973, the U.S. imported 3 million B/D of petroleum products, or about 17 percent of total U.S. oil consumption. By 1984, petroleum product imports had declined to 2 million B/D, but more significantly, represented only 13 percent of U.S. oil consumption. 25/ Nearly 60 percent of these product imports come from U.S. possessions, U.S.-owned refineries in the Caribbean, or from U.S. OECD allies. 26/ In the most recent month for which data is

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25/ Testimony of Danny J. Boggs, Deputy Secretary of Energy, Before The Environment, Energy and Natural Resources Subcommittee of the Committee on Government Operations, U.S. House of Representatives, April 2, 1985.

26/ A more complete breakdown of these imports is as follows:

U.S. possessions or U.S.-owned refineries in the Caribbean	37%
Other OECD nations	21%
Venezuela	15%
Other OPEC	7%

[Footnote continued]

available, April, 1985, API statistics show U.S. imports of crude oil down by 6 percent and imports of all petroleum products down by 18 percent compared to last April. 27/

In 1984, total gasoline and gasoline blending components averaged 370,000 B/D, or only 6 percent of the United States' total gasoline demand. 28/ In an April, 1985 study the ITC concluded that EPA's new rules reducing the lead content of gasoline will cause imports of lead containing gasoline to decline dramatically. 29/ Since nearly 60 percent of our gasoline is now unleaded, 30/ the EPA action may go a long way toward reducing current gasoline import levels.

Of course broad economic forces such as the strength of the dollar and of the U.S. economy compared to other economies are largely responsible for the general

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[Footnote continued]
The Changing Structure of World Refining Industry: Implications for U.S. Energy Security, Prepared by OPEC Downstream Project, Resource Systems Institute, East-West Center, Honolulu, Hawaii, For Presentation to the United States Department of Energy, January 23, 1985, at p. 30.

27/ *Oil Daily*, May 22, 1985, p.5, column 4.

28/ Testimony of Danny J. Boggs, *supra*.

29/ Possible Effects and Recommendations Concerning the Proposed Tariff Reclassification of Catalytic Naphtha and Other Motor Fuel Blending Stocks, Final Report on Investigation No. 332-203 Under Section 332(g) of the Tariff Act of 1930, USITC Publication, United States International Trade Commission, April 1985, p.xi.

30/ *Id.* at p.25.

trend of increasing imports of a variety of products. The petroleum refining industry is not unique in facing pressure from imports.

Those in the independent petrochemical industry can sympathize with our colleagues in the refining industry faced with pressure from foreign producers. Indeed, the decline in our industry's favorable trade balance during 1983 and 1984 has been caused more by increased petrochemical imports into the U.S. than reduced exports. 31/ But the imposition of a crude oil or petroleum product import limitation will weaken the competitive position of the manufacturing industries downstream of crude oil and petroleum product production and very possibly force these other industries to come before you with their claims for protection.

The independent petrochemical industry joined many other industries in welcoming the termination of oil price and allocation controls, including the oil import program. It would be a drastic step backward into time and to reregulation of the energy and petrochemical industries to resurrect an import control program now.

31/ See, Trade Trends in Petrochemicals: 1983, p. 26.

99th CONGRESS
1st Session

IN THE HOUSE OF REPRESENTATIVES

Amendment to H.R. 2354

To clarify the classification of certain petrochemical feedstocks described as both a petroleum product and a benzenoid chemical.

On Page 3, strike line 16 and insert in lieu thereof:

"(2) by amending item 475.35 to read as follows:

475.35	Napthas (including petrochemical feedstock naphthas) derived from petroleum, shale oil, natural gas, or combinations thereof (except those to be used as motor fuel or motor fuel blending stock)........................	.25¢ per gal.	.5¢ per gal

(3) by amending headnote 1 by inserting after the phrase, "except fuel oils, motor fuel," and before the word "and", the words "petrochemical feedstocks"."

On page 3, line 17, strike "(3)" and insert in lieu thereof "(4)"

On page 4, strike lines 3-4 and insert in lieu thereof:

"(5) by adding after subdivision (b) of headnote 2 the following new subdivisions:"

On Page 4, after line 9 insert the following:

"(d) "Petrochemical feedstock" is any product provided for in this Part 10, however produced, derived from petroleum, shale oil, or natural gas, or combinations thereof (except motor fuel) which is actually used as a feedstock for petrochemical production."

Text Of Floor Statement To Accompany Naphtha Imports Amendment

By Mr./Ms. __________________:

An amendment to H.R. 2354 to clarify the classification of certain petrochemical feedstocks described as both a petroleum product and a benzenoid chemical.

Mr./Ms. __________. Mr. Speaker, I am today introducing an amendment to H.R. 2354 which would clarify the tariff treatment the U.S. Customs Service should accord certain petrochemical feedstocks.

The petrochemical industry is a major contributor to the overall U.S. economy. Petrochemicals appear in a wide variety of products which we consume and use every day: medicines, plastics, automobile parts, and textiles, to name just a few. We have all benefitted from the U.S. petrochemical industry's ability to keep the cost of these products low. In addition, in spite of the high value of the dollar which has hurt so many other American industries, the petrochemical industry has remained a net exporter--a positive contributor toward reducing our balance of trade problems.

However, to compete in world markets, this industry must have access to raw materials, referred to as feedstocks, that are priced at competitive levels in the world marketplace. If the costs of these raw materials exceed those costs incurred by foreign competitors, U.S. petrochemical producers simply cannot produce competitively priced products. The U.S. industry's exports will decline, while overseas manufacturers will gain the market share lost by U.S. producers. More American jobs will be lost while we continue the export of our manufacturing employment.

We are faced with just such a possibility. High tariffs currently being levied on certain types of imported naphthas used for petrochemical feedstocks are blocking the industry's access to an import source of raw materials available to foreign petrochemical producers. We must not allow this to continue.

The amendment I am introducing today will clarify that these petrochemical feedstock naphthas should not be assessed the high tariffs applicable to benzenoid chemicals but currently being applied in some cases to naphtha for feedstock use. This amendment will issure that these feedstocks will remain available to the U.S. petrochemical industry. I urge my colleagues to support this amendment, and with it, support the continued vitality of the U.S. petrochemical industry.

Senator NICKLES. Thank you very much, Mr. Rathburn. We appreciate your comments. Mr. Hancock, and also Mr. Bill McGough from Tulsa, OK.

STATEMENT OF NOLAN W. HANCOCK, DIRECTOR, CITIZENSHIP-LEGISLATIVE DEPARTMENT, OIL, CHEMICAL AND ATOMIC WORKERS INTERNATIONAL UNION

Mr. HANCOCK. Thank you, Mr. Chairman. My name is Nolan Hancock. I am the legislative director of the Oil, Chemical and Atomic Workers International Union, with offices here in Washington, DC.

We represent—our union primarily represents the workers in the energy fields—the oil, the chemical, the natural gas, the uranium energy field. We represent the human resource that we're talking about here today, families that are being affected by the actions that we have taken in the past, actions that have not been taken and actions that are going to be taken in the future.

In my union alone over the last 4 years we have seen the loss of more than 50,000 members. Now these are individual families and we need to relate to them because they are your constituents and were our members. I'd like to limit my remarks today to the three areas—the imports of refined products, the human cost, and the current conditions of the domestic refining industry.

And I think we've discussed, we've gone into some depth on the current conditions of the domestic refining industry. But let me say that the members that we represent are efficient, they are hardworking, they are well-trained, and they make the oil industry competitive in this country and internationally.

The problem that we see that faces the members of our union is that they are forced to compete on a situation where subsidized products are coming into this country at costs below the production in this country, the refining industry, the ammonia industry, the uranium industry. And while we've talked about it over the last 4 years, we have seen a viable uranium industry decline until there is no industry left.

Our concern is we see that scenario starting to happen in the oil and the petrochemical industry. As long as we continue to have subsidized product imports, our members are unable to compete and the companies they work for are unable to compete.

The situation in the refining industry has changed since the fallout of the earlier refiners in 1983. The refineries now that are being closed are those refiners who are in energy-producing States where they are close to the crude. They have the sophistication and the modernization of the equipment to refine both the light sweet and the heavy sour and the mix. These are refineries that are in geographic locations close to crude markets and cities or areas where the marketplace can handle their products.

But here again the refineries are closing because there's no profit margin in the refining industry, and only those refineries can stay in business that have access to crude supplies at—where they can take the loss in the refining industry and continue to make a profit on their crude supplies.

We believe that clearly the imports are affecting our members' jobs. We see that. We see the increased scenario of foreign countries adding value to their products, as Mexico adds value to ammonia, and we can name lots of other examples.

But we see other countries in the Mideast building large refineries, looking directly at the U.S. marketplace. And as long as they can price those or use that two-tier pricing system and run their product through their refinery, there is no way that we can compete in the marketplace in the country.

The loss of jobs in the oil refinery industry are not related to the wage rates that our members have, have bargained for. Ashland Oil's Chairman, John Hall, has said that high wage rates are not the problem in oil refining, because labor costs are not a great factor, as the refining industry is not a labor-intensive workplace.

Let me just summarize by talking about the human costs a minute. Our union represents people; therefore, the impact of the surging imports on people's lives are what we are primarily concerned about. I receive letters from our members who are veterans of Korea and World War II, veterans of Vietnam, coming back and going to work in the oil industry and get laid off and becoming deeply depressed.

There is suicides. There is divorces. Homes are lost, cars are lost—a tremendous disadvantage. So I see that my time is gone.

Attached to my testimony today is a list of companies that we represent that have shutdown and the numbers of members and families that are affected. I hope that you will review that. We believe that our Nation can no longer afford to let key industries like the oil industry be forced out of business. We're not seeking protection. We only want the opportunity to compete on an equal footing with foreign producers.

And if the label of protectionism is used, that does not concern us, nor should it concern this administration. National security is not achieved merely through the buildup of more sophisticated equipment. The defense and the interests of the United States and its citizens require a strong industrial base. Our workers should not pay the price of a foreign government subsidy program.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Hancock follows:]

TESTIMONY ON BEHALF OF THE
OIL, CHEMICAL AND ATOMIC WORKERS INTERNATIONAL UNION
BEFORE THE
ENERGY REGULATION AND CONSERVATION SUBCOMMITTEE
OF THE
U.S. SENATE ENERGY AND NATURAL RESOURCES COMMITTEE
ON THE
IMPACT OF IMPORTED PETROLEUM PRODUCTS ON THE DOMESTIC PETROLEUM INDUSTRY

TUESDAY, JUNE 4, 1985

Mr. Chairman and members of the Committee, my name is Nolan W. Hancock. I am the Citizenship-Legislative Director of the Oil, Chemical and Atomic Workers International Union (OCAW). OCAW is the primary representative of workers employed in energy and fuel producing industries, with the exception of coal, and has a total membership exceeding 120,000 with membership in 48 states. I appreciate this opportunity to testify on behalf of OCAW concerning the impact of imported petroleum products on the domestic petroleum industry and on the membership of our union.

I. Current Conditions of the Domestic Refining Industry

As of May 1, 1985, there were less than 200 refineries in operation in the United States. These refineries have the ability to refine 15.1 million barrels per day and represent approximately 21 percent of total world capacity. (Approximately 1.1 million barrels of this capacity is idle). Refineries are located throughout the United States, with concentrations on the West Coast, on the Gulf Coast, the urban Northeast and around Chicago.

Like the other industries we represent, the oil refining sector is undergoing a period of rapid change. This industry has made massive productivity gains. Our members are efficient and hard working which makes the oil industry and are extremely competitive internationally. The U.S. refining industry has invested $12 billion in technology to use heavier crude while producing more light products per barrel. According to Oil and Gas Journal's 1985 Annual refining issue, this upgrading has made the U.S. refining industry the most flexible in the world and "the world leader in refining technology," and should make us the most competitive in the world.

In spite of this major modernization program, the financial condition of the industry is grim. Refineries have been closed down at an unprecedented rate. Numerous bankruptcy proceedings have been instituted. Industry profitability has been drastically reduced and only those refiners who have their own crude production or non-petroleum financial assets have been able to absorb their refining and marketing losses.

Since 1981, 127 refineries have closed. Seventy-seven have been shut down permanently. The closures during 1981 and 1982 were largely the result of two factors. First, many of the refineries which closed during this period were small and technologically incapable of competing in any meaningful way within the industry. These refineries could not refine heavy or sour crude oil and did not have the ability to adjust to changes in crude oil markets. In many instances, these refineries existed as a result of the entitlements program and were forced to close when the program was abandoned.

In addition, many land-locked refineries were unable to adjust to rapidly changing crude oil markets. While some of the refineries which closed during this period were of a more sophisticated variety and had the technology in place to process sweet or sour/heavy or light crude oil into a variety of products, many were located where less accessible crude made operational changes difficult.

Since 1983, a substantially different picture has developed. Refineries are being closed where crude accessibility is not a geographic problem. The hardest hit areas are high producing states such as Oklahoma, Texas and California. Indeed, many of the refineries which have closed in the last 30 months not only are situated in geographical locations where crude is available, but are facilities which invested in modern technology. However, reduced margins which have been exacerbated by a continuing rise in refined product imports resulted in the economic decision to close these facilities.

Today, the U.S. refinery industry is running at 85 percent of operating capacity, compared to a 90 percent average in 1974. Increased imports will further reduce refining utilization levels, causing further job losses as additional refineries close.

In six of the last eight quarters beginning in 1983, a barrel of refined product has sold in the U.S. market for less than the barrel of crude oil used to make it. This has resulted in negative profit margins for virtually all U.S. refiners. The cause of this commercial anomaly is not superior technology abroad. Rather it reflects foreign government subsidized crude which is refined in government owned or heavily subsidized refineries. The U.S. industry cannot compete with these unfairly subsidized imports.

The rapidly increasing volume of imports of refined products has had a devastating effect on employment. The Department of Labor estimates that there are 20,400 fewer production workers in petroleum refineries today than at the end of 1980. The ripple effect triggered by refinery lay-offs can devastate entire communities. As an example, when Texaco decided to reduce capacity by half at its Port Arthur, Texas refinery, 1400 OCAW workers were laid off. Texaco estimates that the elimination of one refinery job in Texas resulted in the elimination of five additional local jobs, and up to 13 other jobs elsewhere in the state. Communities that until recently were thriving may soon become ghost towns.

II. Imports of Refined Products

Imports of refined products have increased at an accelerating rate in recent years. Net imports of refined products averaged 1.4 million barrels per day in 1984, 300,000 more than in 1982. According to the Energy

Information Administration, since 1980, gross imports of gasoline have increased by 150,000 barrels per day, a 108 percent increase over four years. The comparable increase for distillate fuel oil was 128,000 barrels per day, up by 90 percent and for unfinished oils, 175,000 barrels per day, a 318 percent increase. Overall, petroleum product imports increased their share of the U.S. market to more than 12 percent. Gasoline imports are at an all time high and have almost doubled since 1981 to 7 percent of domestic consumption.

Not only are imports increasing in volume, they are also decreasing in price. Imports have injured domestic refiners by reducing their historical market shares and by pushing down prices to the point where profitability is severely jeopardized. The ability of foreign producers to sell cheaply is not due to any advantage in technology or productivity. Rather, it is a direct result of foreign dumping and foreign government policies that subsidize refining operations.

The primary foreign suppliers of gasoline are: China, the Netherlands, Italy, Venezuela, Saudi Arabia, the United Kingdom, West Germany, Brazil, the Netherlands Antilles and Mexico. Over the past four years, most of these countries have steadily increased their U.S. market shares. It has been argued in certain quarters that even today imported refined products do not hold a large share of the U.S. market. Yet even these "low" levels of imports have resulted in thousands of lost jobs for U.S. workers.

The loss in jobs is in no way related to wage rates. As Ashland Oil's Chairman, John R. Hall, has noted: "High wage rates are not the problem (in oil refining), because labor costs are not as great a factor in refining as they are in other basic industries since refining by nature is not labor-intensive."

The Department of Labor figures show roughly 20,000 fewer production workers in petroleum refining today than only four years ago. For OCAW, 5,539 members lost their jobs in the 33 closed plants that were organized by our union. That was through the end of 1984. So far this year, closure announcements have been made that will result in 500 more members losing their jobs. Another 4,000 members have been permanently laid off due to partial closures of facilities over the last four years. In all, about 10,000 OCAW refinery workers have joined the unemployed ranks since 1980. These figures do not, however, reflect the loss in jobs due to reductions in force because of "streamlining" -- making do with fewer people wherever possible. We would guess that the total number of lost jobs would be about 20 percent higher, or in excess of 12,000 jobs.

As bad as the present situation is, the upward trend in imports during the past four years combined with numerous foreign refineries scheduled to come onstream soon creates a situation that is truly alarming. Over the next three years, approximately 1.4 million barrels per day of new export refining capacity will come onstream in the Middle East and North Africa. This will augment existing OPEC export capacity by about two million barrels per day. Assuming an 80 percent utilization rate, 1.1 million barrels per day of additional product will be entering world markets. With world demand expected to increase only marginally, the new product will further depress the market and aggravate conditions in the U.S.

Since 1979, Saudi Arabia has increased its refining capacity by 77 percent. Six major Middle East and North African refinery projects are scheduled to come onstream over the next few years. Approximately 700,000 barrels per day of rated capacity will start up by year end 1985, with the balance by 1987. OPEC's limits on export volumes of crude oil are not matched by similar limits of exports of petroleum products. Consequently, there's a strong incentive for the OPEC nations to refine their crude domestically and sell the products in foreign markets.

Other developing nations also plan to significantly increase their refining capacity. As reported in the Oil and Gas Journal, Nigeria has recently decided to build a 150,000 barrel per day refinery in Port Harcourt which is expected to result in about 100,000 barrels per day of exportable product. In its national industrial development plans, Mexico has indicated its intentions to significantly increase the size of its refining industry. As noted in the recent publication by the International Trade Commission, "Potential Effects of Foreign Governments' Policies of Pricing Natural Resources," (May 1985), a major rationale behind the expansion plans is to expand exports to gain additional foreign exchange.

The U.S. market will clearly be the target for foreign producers. I wish to bring to the Committee's attention Saudi Arabia Minister of State's remarks in reference to the new 250,000 barrel per day refinery in Yanbu. He states: "We designed the Yanbu refinery in particular with the U.S. in mind. The gasoline is not good for Europe. Basically it is good for the United States."

Moreover, many foreign markets are already oversaturated with refined products. Even if the new export refineries plan to direct their product to the European market, displaced capacity would have a direct impact on the U.S. market. Already, exports of European refined products to the U.S. have increased dramatically.

Finally, many major foreign markets restrict the importation of refined products. The International Energy Agency recently prepared a preliminary overview of trade measures in a number of OECD countries affecting oil products.

1. France maintains restrictions (import licensing) which limit the access of non-EC products to 20 percent of total French imports.
2. In Greece, the state has a monopoly on product imports. These imports are subject to a licensing scheme executed by the Ministry of Trade.
3. In Ireland, oil companies are obliged to purchase 35 percent of their product throughput from the domestic refinery.
4. According to the administrative decision, Japan does not allow gasoline imports. An attempt by a Japanese oil distributing company to import gasoline from Singapore was recently blocked by MITI, the Ministry of Industry and International Trade.

The above examples all demonstrate that if the U.S. does not take effective measures soon to reduce the flood of refined product imports into the U.S. market, the domestic industry will be forced to cut back severely and the U.S. will become increasingly dependent on foreign energy sources.

Skyrocketing imports and refinery shutdowns clearly weaken national security. The threat of possible supply disruption is increased, and the ability of the refining industry to provide adequate supplies of refined products in the event of required mobilization of U.S. armed forces is jeopardized. I am not an alarmist, but it is not difficult to imagine various scenarios under which the supplies of refined products of the U.S. could be disrupted. We cannot afford to assume that in a crisis, trade flows would be unaffected. Furthermore, we should not forget that less than 12 years ago we were the victims of an embargo.

The inadequacy of the Strategic Petroleum Reserve (SPR) is also very important. The SPR was a key element of the elaborate system of law and policy constructed in the wake of the energy crises of 1973 and 1979 to protect the U.S. national security in the event of a crude oil import disruption. As a result of the greatly increased imports of gasoline and blend stocks and the forced closing of refineries, we are nearing the point where we cannot offset the petroleum and refined petroleum supply disruption by drawing on the SPR on the planned rate of 4.4 billion barrels per day.

At the maximum withdrawal rate, we can barely process domestic production plus SPR withdrawals — even at an unrealistic 100 percent utilization rate. This situation only promises to get worse when more refineries are forced to close. Once a refinery is idle, it cannot be simply turned back on because of need. The cost for restarting an average sized idle refinery can run as high as $100 million. Moreover, once idle, plants degenerate quickly and require substantial repair before they can be started up again. Finally, plant personnel must be highly trained to run a modern refinery safely and efficiently. Adequate training requires a minimum of three to six months, although for some higher skilled jobs it takes years to develop the necessary experience and skills.

III. The Human Cost

Our union represents people. Therefore, it is the impact of these surging imports on people's lives about which we are primarily concerned. This impact has been devastating.

Attached to my testimony is a listing of plant shutdowns and OCAW members' jobs lost. As I indicated earlier, roughly 10,000 OCAW refinery workers have been laid off. Many of these closures are due directly to foreign competition.

Our members are highly skilled employees. Shutting the door on their jobs not only leads to industrial decay, but it forces these highly skilled workers to accept jobs, if they can find them, in much lower paying fields, and leads often to great human suffering. To make matters worse, the President's proposed budget will do away with needed worker adjustment assistance proposals, making the situation more critical.

Our nation cannot afford to let its key industries be driven out of business by foreign policies and products. We are not playing on a level field of equal competition, and American communities and families are suffering as a result as well as, we believe, our national security.

The Oil, Chemical and Atomic Workers strongly urge the Congress to take action to stem the tide of imported refined products. We are not seeking protection. We only want the opportunity to compete on an equal footing with foreign producers. If the label of protectionism is used, that does not concern us, nor should it concern this administration. National security is not achieved merely through the buildup of more and more sophisticated equipment. The defense of the interests of the U.S. and its citizens also requires a strong industrial base. Our workers should not pay the price of a foreign government subsidy program.

We appreciate this opportunity to testify before this Committee and thank you, Mr. Chairman, for your personal interest in this vital issue.

PERMANENT PLANT CLOSINGS
JANUARY 1980 - APRIL 1985
DOES NOT INCLUDE LAYOFFS DUE TO SEASONAL
OR TEMPORARY MARKET CONDITIONS

LOCAL	COMPANY	LOCATION	DATE CLOSED	PARTIAL OR COMPLETE	WEEKS OF NOTICE	JOBS LOST AT CLOSE AND 2 YEARS PRIOR	PRODUCT LINE	PRODUCT CATEGORY	RUNAWAY PLANT
1-5	[illegible]	RICHMOND, CA	11/81	C	68	9	[illegible]	MISC.	NO
1-5	J R SIMPLOT	LATHROP, CA	1/83	P	4	170	FERTILIZER	CHEMICAL	NO
1-19	CONTINENTAL CARBON	BAKERSFIELD, CA	9/81	C	6	27	CARBON BLACK	CHEMICAL	PONCA CITY, OK*
1-19	TOSCO CORP.	BAKERSFIELD, CA	11/83	C	9	200	OIL REFINING	ENERGY	N/A
1-19	WEST COAST OIL	BAKERSFIELD, CA	6/83	C	8	77	OIL REFINING	ENERGY	NO
1-128	SHELL CHEMICAL	DOMINGUEZ, CA	5/83	C	4	27	PETROCHEMICALS	CHEMICAL	[illegible]*
1-128	GOLDEN EAGLE REF.	WILMINGTON, CA	1/85	C	N/A	14	OIL REFINING	ENERGY	NO
1-128	NATIONAL SUPPLY CO.	TORRANCE, CA	2/85	C	N/A	180	OIL & GAS DRILL MCHRY	MISC.	NO
1-547	[illegible]	EL SEGUNDO, CA	10/80	C	8	80	PLASTICS	CHEMICAL	NO
1-547	WILSHIRE INDUSTRIES	COMPTON, CA	10/80	C	8	26	PLASTICS	CHEMICAL	NO
1-591	[illegible]	OAK HARBOR, WA	12/84	C	N/A	97	PRINTED CIRCUIT MFG.	MISC.	NO
1-590	P&M COAL (GULF OIL)	FORT LEWIS, WA	11/81	C	17	105	P&M COAL RES.	ENERGY	WEST VIRGINIA
# CLOSED 12						972			
2-124	GREAT LAKES CARBON	CASPER, WY	6/83	C	4	15	PETRO. COKE	CHEMICAL	NO
2-229	TEXACO	CASPER, WY	8/82	C	26	165	OIL REFINING	ENERGY	AMARILLO & OTHER
2-371	HUSKY OIL	CODY, WY	11/82	C	26	79	OIL REFINING	ENERGY	N/A
2-476	UNION TANK CAR	LARAMIE, WY	7/85	P	N/A	17	TANK CAR REPAIR	MISC.	N/A
2-477	[illegible] CHEMICAL	DENVER, CO	5/86	C	N/A	55	[illegible] URANIUM	CHEMICAL	NO
2-477	SHELL CHEMICAL	DENVER, CO	12/82	C	30	125	PESTICIDES	CHEMICAL	GULF COAST LA.
2-[illegible]	RALSTON PURINA	[illegible], IL	11/84	C	N/A	10	ANIMAL FEED	MISC.	NO
2-[illegible]	GARY REFINING	FRUITA, CO	6/85	C	N/A	140	OIL REFINING	ENERGY	NO
2-700	QUIVIRA	GRANTS, NM	3/85	C	N/A	271	URANIUM MINE	ENERGY	NO
2-700	[illegible] OIL & MIN.	GRANTS, NM	5/80	C	1	26	URANIUM ORE	ENERGY	NO
2-844	COTTER CORP.	CANON CITY, CO	3/85	C	N/A	55	URANIUM MILL	ENERGY	NO
# CLOSED 11						986			

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LOCAL	COMPANY	LOCATION	DATE CLOSING	PARTIAL OR COMPLETE	WEEKS OF NOTICE	JOBS LOST AT CLOSE AND 2 YEARS PRIOR	PRODUCT LINE	PRODUCT CATEGORY	RUNAWAY PLANT
3-96	[illegible] PAINT	MEMPHIS, TN	8/83	C	13	10	PAINTS	CHEMICAL	NO
3-116	[illegible] PIGMENT	EAST POINT, GA	12/84	C	N/A	22	[illegible]	MISC.	NO
3-265	INT'L. MINERALS & CHEM.	GREENVILLE, TN	6/84	C	N/A	15	FERTILIZER	CHEMICAL	NO
3-180	[illegible]	HUNTINGTON, WV	6/81	P	52	175	STAB & PIGMENTS	CHEMICAL	HOLLAND, MI
3-288	UNION CARBIDE	OAK RIDGE, TN	9/81	P	N/A	600	URAN ISOT 235	ENERGY	NO
3-300	[illegible] PROD.	MONTGOMERY, AL	8/82	C	8	10	CHEM. [illegible]	CHEMICAL	NO
3-300	[illegible] CO	MONTGOMERY, AL	6/80	C	0	10	FERTILIZER	CHEMICAL	NO
3-618	PENNZOIL	FALLING ROCK, W.VA	3/83	C	30	106	PETRO. REFINING	ENERGY	NO
3-523	ALLIED CHEMICAL	E. ASHLAND, KY	10/81	P	N/A	275	COKE	CHEMICAL	NO
3-563	ALLIED MILLS	PORTSMOUTH, VA	3/81	C	20	21	ANIMAL FOOD	MISC.	NO
3-543	GULF OIL	N. NORFOLK, VA	11/83	C	26	19	OIL PROD TERM	ENERGY	NO
3-550	UNION CARBIDE	PADUCAH, KY	1/82	P	N/A	600	URAN ISOT 235	ENERGY	NO
3-552	IRONTON COKE	IRONTON, OH	6/82	C	0	654	COKE	CHEMICAL	NO
3-611	[illegible] CHEMICAL	CHESAPEAKE, VA	7/81	C	11	200	FERTILIZER	CHEMICAL	NO
3-960	[illegible] (GAS METAL)	JONESBORO & DAVID,TN	7/82	C	N/A	139	AUTO. PTS.-STOVES	MISC.	NO
# CLOSINGS 15						2,254			
4-23	TEXACO	PORT ARTHUR, TX	8/83	P	8	1,150	OIL REF-LUBE OILS	ENERGY	VARIOUS*
4-153	[illegible] INDUSTRIES	CORPUS CHRISTI, TX	11/82	C	9	20	[illegible]	CHEMICAL	NO
4-207	CRYSTAL OIL CO	LONGVIEW, TX	3/82	C	8	64	OIL REFINING	ENERGY	NO
4-208	AMERICAN CYANAMID	FORT WORTH, TX	6/83	C	16	120	CATALYSTS	CHEMICAL	N/A
4-[illegible]	[illegible] INC	FORT WORTH, TX	10/80	C	6	36	HOUSEHOLD CLEANERS	CHEMICAL	NO
4-227	ARCO THERMOPLASTICS	HOUSTON, TX	3/83	C	6	68	PLASTICS COMP.	CHEMICAL	HOUSTON, TX
4-227	TRIANGLE PWC	HOUSTON, TX	10/82	C	13	66	PLAS. PIPE COATING	CHEMICAL	N/A
4-229	TEXACO	PORT NECHES, TX	11/82	P	8	81	OIL REF(ASPHALT)	ENERGY	PORT ARTHUR, TX*
4-243	[illegible] MACHINE	BEAUMONT, TX	6/84	C	N/A	80	MACHINE SHOP	MISC.	NO
4-243	[illegible] INDUSTRIES	BEAUMONT, TX	80-83	P	6	180	TETRAETHYL LEAD	CHEMICAL	NO
4-243	[illegible] CO	SILSBEE, TX	12/82	C	N/A	33	OIL REFINING	ENERGY	NO
4-245	BAYOU STATE OIL	HOSSTON, LA	2/82	P	6	27	OIL REFINING	ENERGY	NO
4-245	BAYOU STATE OIL	HOSSTON, LA	2/82	C	6	3	OIL PROD TERM	ENERGY	NO
4-363	CPC INT	CORPUS CHRISTI, TX	2/80	C	11	230	CORN MILLING	MISC.	STOCKTON, CA
4-367	PASADENA CHEM(MOBIL)	PASADENA, TX	12/80	P	3	66	FERTILIZER	CHEMICAL	NO
4-447	[illegible] MARKETING	[illegible], LA	5/82	C	16	17	[illegible]	MISC.	NO
4-447	HUNT WESSON	HARVEY, LA	12/80	C	18	6	VEGETABLE OILS	MISC.	NO
4-449	WEST GULF [illegible]	GALVESTON, TX	12/81	C	8	50	[illegible] BUILDING	MISC.	NO
4-463	PHILLIPS CHEMICAL	BORGER, TX	9/84	C	N/A	203	[illegible]	CHEMICAL	NO
4-471	[illegible] GAS	MT. PLEASANT, TX	10/84	C	N/A	133	OIL REFINERY	ENERGY	NO
4-478	FERTILIZER CO,TX	[illegible], TX	3/81	C	0	31	FERTILIZER	CHEMICAL	PASADENA, TX
4-500	CITIES SERVICE P.L.	LAKE CHARLES, LA	2/84	C	9	20	TANK CAR REPAIR	ENERGY	NO

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LOCAL	COMPANY	LOCATION	DATE SHUTDOWN	PARTIAL OR COMPLETE	WEEKS OF NOTICE	NUMBER LAID OFF AT CLOSING AND 2 YEARS PRIOR	PRODUCT LINE	PRODUCT CATEGORY	RUNAWAY PLANT
6-500	CITIES SERVICE	LAKE CHARLES, LA	3/83	C	18	70	[illegible]	CHEMICAL	SARNIA, ONTARIO
6-629	GULF STATES**	BATON ROUGE, LA	7/82	P	0	60	[illegible]	CHEMICAL	NO
6-730	PHILLIPS CHEMICAL	CACTUS, TX	11/82	C	13	60	FERTILIZERS	CHEMICAL	N/A
6-955	US STEEL	GEORGE WEST, TX	10/82	P	44	95	URANIUM OXIDE	ENERGY	N/A
6-10000	ETHYL CORP.	PASADENA, TX	7/81	P	9	210	TETRAETHYL LEAD	CHEMICAL	NO
# CLOSED 27						3,255			
5-107	MILCHEM INC.	MINERAL POINT, MO	8/82	C	6	17	BARITE MILL	CHEMICAL	NO
5-18	KV PHARMACEUTICAL	ST. LOUIS, MO	12/80	C	0	30	PHARMACEUTICALS	CHEMICAL	NO
5-217	[illegible] CORP.	CLAREMORE, OK	6/82	C	13	150	FARM EQUIPMENT	MISC.	[illegible]
5-217	TEX INDUSTRIES	TULSA, OK	3/83	C	2	25	PAINTS	CHEMICAL	NO
5-217	TEXACO	TULSA, OK	8/82	C	26	284	OIL REFINING	ENERGY	PORT ARTHUR ETC*
5-220	CHAMPLIN PETROLEUM	ENID, OK	2/84	C	9	300	OIL REFINING	ENERGY	NO
5-241	[illegible] REF.	EL DORADO, KS	1/85	C	N/A	170	OIL REFINING	ENERGY	NO
5-246	MOBIL OIL	AUGUSTA, KS	9/83	C	26	200	OIL REFINING	ENERGY	NO
5-281	ALLIED MATERIALS	STROUD, OK	12/84	C	N/A	88	OIL REFINING	ENERGY	NO
5-281	HUDSON OIL**	CUSHING, OK	12/82	C	0	140	OIL REFINING	ENERGY	NO
5-348	MOBIL PIPE LINE	MID CONTINENT USA	9/83	C	26	60	OIL PIPELINE	ENERGY	NO
5-348	TEXACO-CITIES SERV.	MIDWEST USA	8/82	P	N/A	45	CRUDE OIL P.L.	ENERGY	NO
5-379	OLIN CORP.	N. LITTLE ROCK, AR	5/80	C	18	21	FERTILIZER MFGR.	CHEMICAL	NO
5-379	OLIN CORP.	N. LITTLE ROCK, AR	1/82	C	2	16	SULFURIC ACID	CHEMICAL	NO
5-379	REICHHOLD CHEMICAL	MALVERN, AR	5/80	C	1	24	RESINS	CHEMICAL	NO
5-385	AMERICAN [illegible] P.L.	CYRIL, OK	9/84	C	N/A	9	CRUDE OIL PIPELINE	ENERGY	NO
5-385	OKLAHOMA REF.	CYRIL, OK	11/84	C	N/A	71	OIL REFINING	ENERGY	NO
5-450	CRA (CRC-BASIN)	[illegible], OK	7/82	C	0	74	OIL REFINING	ENERGY	NO
5-513	[illegible]	ST. LOUIS, MO	8/84	C	N/A	16	PLASTIC NOVELTIES	CHEMICAL	NO
5-572	MID AMERICA REF.	CHANUTE, KS	9/81	C	0	30	OIL REFINING	ENERGY	NO
5-604	PHILLIPS PETROLEUM	KANSAS CITY, KS	9/82	C	26	475	OIL REFINING	ENERGY	HOUSTON, TX., ETC.
5-617	CPC INT'L.	N. KANSAS CITY, MO	10/81	P	22	215	CORN PRODUCTS	MISC.	ARGO, IL
5-67	AMOCO OIL	SUGAR CREEK, MO	9/82	C	26	340	OIL REFINING	ENERGY	BEAUMONT, TX, ETC*
5-797	[illegible]	DUNCAN, OK	11/83	C	26	236	OIL REFINING	ENERGY	NO
5-798	CRA INC.	PHILLIPSBURG, KS	10/82	C	26	108	OIL REFINING	ENERGY	NO
5-811	ALLIED CHEMICAL	HELENA, AR	2/82	P	1	80	FERTILIZERS	CHEMICAL	NO
5-811	[illegible]	HELENA, AR	5/82	C	6	55	BARGES	MISC.	NO
5-857	CONOCO TRANSPORTATION	PONCA CITY, OK	3/85	C	N/A	12	RAIL CAR REPAIR	MISC.	NO
# CLOSED 28						3,219			

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LOCAL	COMPANY	LOCATION	DATE SHUTDOWN	PARTIAL OR COMPLETE	YEARS OF SERVICE	JOBS LOST AT CLOSE AND 2 YEARS PRIOR	PRODUCT LINE	PRODUCT CATEGORY	RUNAWAY PLANT
6-18	[illegible]	BUTLER, WI	10/80	C	7	39	MACHINERY	MISC.	NO
6-111	[illegible] DEV. [illegible]	BURLINGTON, WI	3/84	C	9	22	TRENCH CONTRACTOR	MISC.	NO
6-609	[illegible]	ST. PAUL, MN	3/83	C	18	100	TOILETRIES	CHEMICAL	RALEIGH, NC
6-503	FARMLAND INDUSTRIES	FORT DODGE, IA	9/83	P	0	24	AMMONIA	CHEMICAL	KANSAS, OK. PLANTS
6-501	LAND O' LAKES	FORT DODGE, IA	12/83	C	9	32	HOT ROAD MILL	MISC.	NO
6-578	GUGGY'S SUPER VALUE	AUSTIN, MN	8/80	C	0	38	GROCERY STORE	MISC.	NO
6-659	CONOCO	MARSHALL, MN	5/81	C	9	96	OIL REFINING	ENERGY	NO
6-717	GILLILLAN FORD**	HASTINGS, MN	7/82	C	0	10	AUTO DEALERSHIP	MISC.	NO
# CLOSES 8						361			
T-103	MEADOW GOLD DAIRY	DAYTON, OH	7/82	C	1	31	DAIRY OPERATION	MISC.	WESTERVILLE, OH
T-140	ACA GAS	CLEVELAND, OH	9/83	P	13	9	INDUSTRIAL GASES	CHEMICAL	VARIOUS
T-148	ROYAL CHEMICAL	CLEVELAND, OH	12/80	C	2	10	PAINT LOCAL	CHEMICAL	NO
T-155	R.P. SCHERER	DETROIT, MI	6/81	C	106	350	PHARMA. CAPSULES	CHEMICAL	CLEARWATER, FL
T-176	PARKE DAVIS	DETROIT, MI	7/82	C	104	700	PHARMACEUTICALS	CHEMICAL	PANAMA & P.C.
T-210	ACA GAS	HOMEWOOD, IL	2/84	C	14	2	INDUSTRIAL GASES	CHEMICAL	NO
T-210	HARSHAW CHEMICAL	CHICAGO, IL	5/82	C	0	30	PAINTS	CHEMICAL	NO
T-210	ENERGY COOPERATIVE	E. CHICAGO IND.	3/82	C	9	420	OIL REFINING	ENERGY	NO
T-210	ESTECH CHEMICAL	CALUMET CITY, IL	8/82	C	6	7	SULFURIC ACID	CHEMICAL	NO
T-210	UNION TANK CAR	WHITING, IN	8/80	C	52	158	TANK CAR REPAIR	MISC.	BATON ROUGE, LA*
T-210	WITCO CHEMICAL	HAMMOND, IN	9/80	C	9	6	FATTY ACIDS	CHEMICAL	NO
T-210	YOUNG METAL PROD.	E. CHICAGO, IN	6/80	C	9	10	STEEL CULVERT	MISC.	NO
T-210	TEXACO	LOCKPORT, IL	10/81	C	28	693	OIL REFINING	ENERGY	LAWRENCEVILLE, IL*
T-222	VELSICOL CHEMICAL	ST. LOUIS, MO	6/80	C	104	250	PESTICIDES (PRO)	CHEMICAL	NO
T-224	LEVER BROS.	HAMMOND, IN	2/81	P	9	500	MARGARINE	MISC.	IL, OH, TX
T-316	ARA FOOD SERVICES	HAMMOND, IN	9/81	C	6	14	CAFETERIA SERVICE	MISC.	NO
T-316	GULF OIL	TOLEDO, OH	8/81	C	26	169	OIL REFINING	ENERGY	NO
T-346	GULF OIL	TOLEDO, OH	11/82	C	26	6	OIL PROD. TERMINALS	ENERGY	NO
T-346	PHILLIPS CHEMICAL	TOLEDO, OH	6/81	C	9	40	CARBON BLACK	CHEMICAL	NO
T-346	USS CHEMICAL	MARTIN, OH	12/82	C	0	25	POLYSTYRENE RESINS	CHEMICAL	NEVILLE IS., PA
T-366	CAPTAIN-TED DETROIT	LAWRENCEVILLE, IL	7/82	C	17	10	PVC PLASTIC PIPE	CHEMICAL	NO
T-368	ATLANTIC RICHFIELD	DEARBORN, MI	3/80	C	260	35	PETROLEUM PROD MKT	ENERGY	NO
T-389	GULF OIL	FLINT, MI	5/81	C	36	23	PETROLEUM PROD MKT	ENERGY	NO
T-399	STANDARD OIL OF OH	CLEVELAND, OH	12/81	C	9	65	ASPHALT REFINING	ENERGY	NO
T-395	ASHLAND OIL	FINDLAY, OH	5/81	P	9	21	OIL REFINING	ENERGY	CANTON, OH*
T-420	UNITY PACKAGING	CANTON, OH	9/81	C	14	20	MANIFOLD CHEMS	CHEMICAL	NO
T-450	BANDAG CO.	CHICAGO, IL	9/82	C	26	160	FRICTION TAPE-ADHESI	CHEMICAL	N/A
T-498	H.B. FULLER	CHICAGO, IL	7/80	C	6	12	ADHESIVES	CHEMICAL	NO
T-507	NATIONWAY TERMINALS	STICKNEY, IL	6/82	P	N/A	5	PETRO. PROD. TERMIN	ENERGY	NO
T-507									

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LOCAL	COMPANY	LOCATION	DATE SHUTDOWN	COMPLETE OR PARTIAL	WEEKS OF NOTICE	JOBS LOST AT CLOSE AND 2 YEARS PRIOR	PRODUCT LINE	PRODUCT CATEGORY	RUNAWAY PLANT
7-560	GRATIOT CTY. [illegible]	ALMA, MI	3/82	C	20	17	[illegible]	MISC.	NO
7-560	PLASTIC FIBER INC.	ITHACA, MI	7/82	C	11	60	PLASTIC AUTO PARTS	CHEMICAL	[illegible] CITY, MI
7-560	WHITMAN INDUSTRIES	ITHACA, MI	7/82	C	6	44	PREFAB HOMES	MISC.	N/A
7-581	TROJAN POWDER INC.	WOLFLAKE, IL	12/81	C	6	130	DYNAMITE	CHEMICAL	NO
7-627	BASF-WYANDOTTE	WYANDOTTE, MI	5/80	P	6	767	INDUSTRIAL CHEMS.	CHEMICAL	GEISMAR LA
7-630	CARBORUNDUM	LOGAN, OH	5/83	C	9	281	GRINDING WHEELS	MISC.	NO
7-631	ATLANTIC RICHFIELD	YOUNGSTOWN, OH	5/82	C	65	6	PETRO. PROD. TERMIN	ENERGY	NO
7-641	VELSICOL CHEMICAL	MARSHALL, IL	2/80	P	9	83	PESTICIDES	CHEMICAL	NO
7-662	CPC INTERNATIONAL	PEKIN, IL	10/81	P	52	278	CORN MILLING	MISC.	WINSTON/SALEM,NC
7-663	CORN SWEETENERS	GRANITE CITY, IL	3/83	C	9	14	CARAMEL COLORING	MISC.	NO
7-765	[illegible] LABORATORIES	CHICAGO HTS., IL	3/80	C	26	48	ANIMAL GROWTH HORMONE	CHEMICAL	DAYTON, OH
7-767	KOPPERS CO.	ORRVILLE, OH	2/80	P	9	65	RAILROAD TIES	MISC.	NO
7-776	AMOCO OIL CO.	WOOD RIVER, IL	10/81	P	30	100	OIL REFINING	ENERGY	NO
7-822	[illegible] RECYCLING	[illegible], IN	2/80	P	0	10	CHEMICAL [illegible]	CHEMICAL	NO
# CLOSNG.									
	63					5,662			
8-1	TEXTRON	EDGEWATER, NJ	11/81	C	6	28	CASTOR OIL PRODUCTS	CHEMICAL	NO
8-2	CENTURY INKS	[illegible], MD	3/82	C	1	5	PRINTING INKS	CHEMICAL	NO
8-124	[illegible]	CRANFORD, NJ	12/83	C	14	242	[illegible] PRODUCTS	CHEMICAL	N/A
8-149	[illegible] CHEMICAL	MT. VERNON, NY	10/84	C	N/A	10	[illegible] CONSULTANTS	CHEMICAL	NO
8-149	COMBUSTION EQUIP.	BRIDGEPORT, CT	12/80	P	9	61	GARBAGE-SOLID FUEL	ENERGY	NO
8-149	HELENA RUBINSTEIN	EAST HILLS, NY	7/81	C	52	300	COSMETICS	CHEMICAL	NO
8-149	[illegible] SPARK PLUG	EAST ORANGE, NJ	1/82	C	156	11	SPARK PLUGS	MISC.	NO
8-215	ARA SERVICES	TONAWANDA, NY	12/80	C	18	5	PLANT CAFETERIA	MISC.	NO
8-222	NATIONAL GYPSUM	AKRON, NY	12/80	C	6	29	WALLBOARD TAPE	MISC.	NO
8-240	TECHNICAL COATINGS	OAKMONT, PA	11/81	C	26	15	PAINTS	CHEMICAL	NO
8-280	[illegible] CHEMICAL	[illegible], NJ	12/84	C	N/A	70	DYESTUFFS	CHEMICAL	NO
8-247	NATIONAL GYPSUM	CLARENCE CENTER, NY	1/82	C	1	60	GYPSUM WALLBOARD	MISC.	ALBANY, NY
8-[illegible]	[illegible] CARBIDE (GULF)	LINDEN, NJ	9/80	C	N/A	30	CARBIDE	MISC.	[illegible], PA
8-[illegible]	AMOCO OIL	PROVIDENCE, RI	1/84	P	N/A	10	PETRO. PROD. TERM	ENERGY	NO
8-[illegible]	COMMUNITY OIL	S. PORTLAND, ME	11/84	C	N/A	6	FUEL OIL TERMINAL	ENERGY	NO
8-[illegible]	DELAWARE VAL. PROP.	[illegible], CT	3/81	C	0	8	PROPANE DELIVERY	ENERGY	NO
8-[illegible]	A. P. DE SANNO	PHOENIXVILLE, PA	7/83	C	9	106	GRINDING WHEELS	MISC.	[illegible], IL
8-[illegible]	AMOCO OIL	CARTERET, NJ	12/83	C	12	12	PETRO. PROD. WHSE	ENERGY	N/A

LOCAL	COMPANY	LOCATION	DATE SHUTDOWN	COMPLETE OR PARTIAL	WEEKS OF NOTICE	JOBS LOST AT CLOSE AND 2 YEARS PRIOR	PRODUCT LINE	PRODUCT CATEGORY	RUNAWAY PLANT
8-397	[illegible]	FORDS, NJ	4/85	C	12	2	ORGANIC CHEMICALS	CHEMICAL	NO
8-398	ACME [illegible] CO.	PHILADELPHIA, PA	[illegible]/84	C	N/A	125	ANIMAL OILS & CHEMS	CHEMICAL	NO
8-398	ALCO CHEMICAL	PHILADELPHIA, PA	3/80	C	N/A	12	SURFACTANTS	CHEMICAL	W.VA
8-398	BP OIL	PHILADELPHIA, PA	1/83	C	7	3	RECLAMATION SHOP	ENERGY	NO
8-398	CENTURY INKS	PENNSAUKEN, NJ	3/82	C	4	7	PRINTING INKS	CHEMICAL	ONTARIO, CANADA
8-398	[illegible]	PHILADELPHIA, PA	12/82	C	18	83	PLASTICIZERS	CHEMICAL	N/A
8-406	AIR PRODUCTS CO.	BOUND BROOK, NJ	4/82	C	4	32	PLASTICS & RESINS	CHEMICAL	NO
8-406	C.B. CRYSTAL	JERSEY CITY, NJ	5/81	C	9	5	CHEM WAREHOUSE	CHEMICAL	NO
8-406	[illegible]	JERSEY CITY, NJ	12/82	C	9	60	PAINTS	CHEMICAL	BOSTON, MA
8-406	ROYCE CHEMICAL	E. RUTHERFORD, NJ	2/82	C	4	115	ZINC OXIDE	CHEMICAL	PORTSMOUTH, VA
8-417	[illegible] LABORATORIES	PATERSON, NJ	8/81	C	0	9	DYESTUFFS	CHEMICAL	NO
8-438	SQUIBB CO.	NEW BRUNSWICK, NJ	9/82	P	5	296	PENICILLIN	CHEMICAL	NO
8-455	PENNZOIL	ROUSEVILLE, PA	4/83	C	9	12	PRINTSHOP	ENERGY	LOS ANGELES, CA
8-43[illegible]	GETTY OIL	NEW HAVEN, CT & PROVIDENCE, RI	1/85	C	N/A	50	OIL PROD. TERM	ENERGY	NO
8-472	TEXACO	NEW HAVEN, CT	12/82	P	9	8	PETRO. PROD. TERM.	ENERGY	NO
8-477	C.B. STUART	NEWARK, NY	6/82	C	4	350	CONTRACT PACKAGING	MISC.	NO
8-481	QUAKER STATE	EMLENTON, PA	10/80	P	14	96	OIL REFINING	ENERGY	NO
8-548	UNION CARBIDE	WASHINGTON, PA	3/83	C	104	53	INDUSTRIAL GASES	CHEMICAL	HATFIELD, PA*
8-562	PARTICLE SIZE TECH.	LAKEHURST, NJ	6/81	C	N/A	24	CHEMICAL GRINDING	CHEMICAL	NO
8-580	[illegible] CORP.	NESCOPECK, PA	5/81	C	0	15	REBUILDING PLANT	MISC.	NO
8-584	[illegible] PAINTS	BROOKLYN, NY	7/80	P	N/A	100	PAINTS	CHEMICAL	NO
8-600	UNION CARBIDE	KITTANNING, PA	10/82	C	8	77	AIR SEPARATION	CHEMICAL	NO
8-616	ALLIED CHEMICAL	BUFFALO, NY	8/82	C	9	53	POLYETHYLENE RESINS	CHEMICAL	ORANGE, TX
8-619	STAUFFER CHEMICAL	SKANEATELES FALLS,NY	8/81	P	22	38	[illegible] CHEMS	CHEMICAL	NO
8-623	TEXACO	BAYONNE, NJ	1 & 5/85	C	N/A	171	OIL PROD. TERMINAL	ENERGY	NO
8-638	TEXACO	WESTVILLE, NJ	2/83	P	7	140	PETRO. REFINING	ENERGY	NO
8-673	AMER. COLOR & CHEM.	LOCK HAVEN, PA	6/83	C	52	230	DYESTUFFS	CHEMICAL	
8-729	[illegible] CHEMICAL	PHILLIPSBURG, NJ	7/81	P	6	256	CHEMICALS PRO	CHEMICAL	JACKSON,TN DANVL,KY
8-729	PURITY ZINC METALS	EASTON, PA	3/83	C	0	10	ZINC SMELTER	MISC.	NO
8-732	AMOCO CHEMICAL	NEW CASTLE, DE	4/81	C	14	175	POLYPROPYLENE	CHEMICAL	NO
8-775	[illegible]	SEE 8-3660		C				CHEMICAL	
8-784	UNION CARBIDE	WAYNE, NJ	7/80	C	14	290	PLASTIC BAGS	CHEMICAL	E. HARTFORD, CT
8-787	[illegible] CHEM. CORP	[illegible] MTN, NJ	10/81	C	9	51	MISC. CHEMICALS	CHEMICAL	NO
8-793	BP CO.	[illegible] PA	7/83	C	26	6	CRUDE OIL TRANSPORT	ENERGY	NO

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LOCAL	COMPANY	LOCATION	DATE SHUTDOWN	COMPLETE OR PARTIAL	WEEKS OF NOTICE	JOBS LOST AT CLOSE AND 2 YEARS PRIOR	PRODUCT LINE	PRODUCT CATEGORY	RUNAWAY PLANT
8-830	NL INDUSTRIES	SEE 8-3660		C				CHEMICAL	
8-837	KAWECKI BERYLCO	HAZLETON, PA	8/81	C	23	175	BERYLLIUM COMPOUNDS	CHEMICAL	NO
8-901	SUN OIL	MARCUS HOOK, PA	2/84	C	N/A	250	LUBE MANUFACTURING	ENERGY	NO
8-3660	NL INDUSTRIES	SAYREVILLE, NJ	12/83	C	3	475	PIGMENTS	CHEMICAL	CANADA, EUROPE
8-6270	MOBIL OIL	BUFFALO, NY	8/81	P	19	153	OIL REFINING	ENERGY	NO
8-12058	CARBORUNDUM	NIAGARA FALLS, NY	5/83	P	9	350	GRINDING WHEELS	MISC.	NO
8-20581	H. & R. JOHNSON	KEYPORT, NJ	9/81	P	N/A	105	CERAMIC TILES	MISC.	CANADA
# GROUPS 59						5,430			
TOTAL # GROUPS 203				TOTAL P'S 41 TOTAL C'S 162		TOTAL JOBS LOST 22,159 TOTAL JOBS-ENERGY 9,017 TOTAL JOBS-CHEM. 9,191 TOTAL JOBS-MISC. 3,949			

* OCAW ORGANIZED PLANTS

**THERE IS SOME CHANCE THAT THIS PLANT MAY REOPEN AT SOME TIME IN THE FUTURE.

NOTE - ABOVE INCLUDES BUT DOES NOT ACCOUNT SEPARATELY FOR OCAW MEMBERS LAID OFF AND TRANSFERRED TO OTHER COMPANY LOCATIONS.
ALSO INCLUDES NON-MEMBERS IN BARGAINING UNIT.

Oil, Chemical and Atomic Workers
International Union

INTERNATIONAL REPRESENTATIVE

May 29, 1985

Senator Don Nickels
United States Senate
Washington, D. C. 20510

Nolan Hancock, Director
Citizenship-Legislative Dept.
OCAW International Union
1126 16th St. N.W.
Washington, D. C. 20036

Subject: Refinery Closings

I have been involved in some five (5) closing of Oil Refinery's in Oklahoma and one (1) Oil Refinery in Kansas. Each of the closings bring the same effect(s) to the employee. For the past fifty (50) years when an employee got a job in a refinery it was a "lifetime" job as long as he performed satisfactorily on his job. Job security was automatically there because seldom was there a layoff and almost non-existant was there word of a refinery closing. Now, in the 1980's the refinery's are being closed. Some thru bankruptcy and some for economic reasons and consolidation of its refinery's by certain big oil companies.

Each of the closings caused a devastating effect upon the employee(s) and their families. Family life was completely disrupted everywhere. Some families were torn apart by death and divorce. Laid off workers have lost their homes and cars and then their pride because they cannot find decent employment anywhere. Refinery's located in small towns like Cyril, Oklahoma (population 1300 people) lost their only industry. The whole town depended upon the refinery for it's existence. No place else to work in Cyril so most of the workers had to go to other towns in Oklahoma and even other states to find work.

The Companies, Tosco Corporation, Champlin Petroleum Company, Allied Material Company, OKC Refinery and the Pester Refinery offered no transfers for any bargaining unit employee. Very few, if any, of the management and/or clerical employees were transferred.

Tosco Corporation and Champlin Oil Company negotiated a plant closing agreement with the Union. Severance pay and certain other minimal benefits were given to the employees. Allied Material Company gave a "take it or leave it" closure agreement with very small benefits. Bankruptcies of OKC Refinery, Cyril, Oklahoma Refinery and Pester Refining Company left the employees with nothing. They only had the right to file claims in the bankruptcy court to get what they had already earned in the area of severance pay, accrued vacation time and unused sick leave.

To really understand the effect of plant and refinery closings a study should be conducted. Each employee involved should be interviewed and his story told. The closings are not over. They continue. Some way it must be stopped. The most important fact, as I see it, is these refinery's will never start back up and the closings continue...

Following is a list of the refinery's and some information about each:

1. OKC Refinery, Okmulgee, Oklahoma, population 15,000. 24,000 Barrel Per Day (BPD) Refinery. Closed in 1982, bankruptcy, filed Chapter 11. Total employees involved 125. No plant closure agreement negotiated.

2. Tosco Corporation Refinery, Duncan, Oklahoma, population 19,000. 48,500 BPD Refinery. Closed in August 1983 due to financial condition of the Tosco Corporation. Total employees involved was 350. Plant closure agreement was negotiated.

3. Champlin Oil Company Refinery, Enid, Oklahoma, population 44,800. 57,000 BPD Refinery. Closed in November, 1983 for economic reasons and getting out of the Oklahoma marketing area. However, the Company did keep their production and natural gasoline plants in Enid and Oklahoma City. Total employees involved over 300. Plant closure agreement was negotiated.

4. Allied Material Company, Stroud,Oklahoma, population 2,500. 8,000 BPD Refinery. Closed due to economic conditions of the Company. Some 80 employees involved. Closed December 1984.
5. Cyril Refinery, Cyril, Oklahoma, population 1300. 15,500 BPD Refinery. Refinery closed in July, 1984 bankruptcy, filed Chapter 11. Total employees involved, 130. No closure agreement negotiated.

6. Pester Refining Company, El Dorado, Kansas, population 16,000. 37,000 BPD Refinery. Partial closing March 5, 1985 from 136 hourly employees to 21 hourly employees. Continuing asphalt operations for a temporary period. Complete shutdown by July 1 or October 1st depending on bankruptcy court and able to obtain operating money. No plant closure agreement negotiated. Union did give contract concessions to help company. Company filed bankruptcy, Chapter 11. Some 200 employees will be involved when the complete closure occurs.

Respectfully submitted,

Billie R. Dameron, Representative
OCAW International Union

Senator NICKLES. Thank you very much, Mr. Hancock.

Mr. McGough, did you have some additional comments that you wanted to make?

STATEMENT OF BILL McGOUGH, INTERNATIONAL REPRESENTATIVE, OIL, CHEMICAL AND ATOMIC WORKERS INTERNATIONAL UNION

Mr. McGOUGH. If I may, Mr. Chairman.

Mr. Chairman and members of the committee, it is with a sense of awe, humility and great respect that I appear before you today. I am grateful to have the opportunity on behalf of the Oil, Chemical and Atomic Workers International Union and the members of our union who have lost their jobs due to plant closings. My name is Bill McGough. I am an international representative of the Oil, Chemical and Atomic Workers International Union stationed in Tulsa, OK.

I come to share with you firsthand knowledge in my own folksy way, of the disruption, pain and suffering that has been wrought on many families in Oklahoma and throughout our union.

The following list, Mr. Chairman—and I thought this would be of particular interest to you—shows refinery shutdowns in Oklahoma during the last 3 years. In 1982, Basin Petroleum of Okmulgee, OK, with a capacity of 24,000 barrels a day, 125 families out of work; Texaco, Tulsa, OK, 50,000 barrels per day, 385 families affected; Hudson Oil Refinery, Cushing, OK, 19,000 barrels per day, 200 families.

In 1983, Tosco Refinery, Duncan, OK, 48,500 barrels per day, 350 families.

In 1984, Champlin Refinery, Enid, OK, 55,000 barrels per day, 450 families; Allied Materials, Stroud, OK, 8,500 barrels per day, 132 families; Oklahoma Refining Co., Cyril, OK, 15,500 barrels per day, 200 families.

We feel that most of these refiners were shut down because oil companies were allowed to import refined products into our country. For example, at the same time Texaco closed their Tulsa Refinery, they were importing 400,000 barrels of gasoline per month from Red China.

A further cuse is the lack of a Federal policy on fair trade which allows foreign subsidized products to compete fairly—unfairly with American refined products.

Many of our members who were affected by these plant closings were personal friends of mine. Some of them declared bankruptcy, others lost cars and homes, many have exhausted their savings and long since their unemployment benefits, and still are unable to find gainful employment. This has led to numerous divorces and broken homes.

When decisions are made in corporate board rooms to close a facility, for whatever reason, it appears that little consideration, if any, is given to the impact that follows. Jobs are lost, not only by the employees, but many jobs in support companies. Jobs lost mean less revenue in taxes all the way from the community to the cities, county, State, and Federal Governments.

These plant closings are devastating to small rural communities such as Cyril, OK, with a population of 1,220 people. The refinery was the largest employer within 50 miles of Cyril.

All of this, we feel, has been brought on because imported refined products are sold in the United States at lower cost than U.S. producers can refine the products, due to foreign subsidies and government-owned companies that subsidize their government-owned industries.

We feel that continuing to import more and more refined products could result in a very serious situation in case of war. We now have only two major refineries in Oklahoma, and many have closed in the Midwest—Arkansas, Kansas, Missouri, and Illinois.

The average citizen is the victim of these refinery closings. They have no control over their destiny, nor do we as their union representatives. As, for instance, we were in contract negotiations with Texaco at the time they announced their intent to close the Tulsa refinery. During these negotiations, the union had submitted proposed contract changes pertaining to wages, benefits, and so forth, as is our normal procedure. The company submitted their proposals dealing with reductions, starting wages, overtime pay, and so forth.

At our next negotiating session, after we were told of the shutdown, I asked the Texaco negotiator if the union would agree to withdraw all of its proposals and accept the company's proposal could this save this plant. The answer was no. Then I asked what could we as a union do to keep the plant open. The company's answer was, nothing. The corporate decision had been made, the axe was poised to drop and radically change the lives and living conditions for 385 families.

Another industry that has been hard hit due to imported products is the fertilizer industry. I also represent members in this industry. I am told by the companies that I negotiate with in Oklahoma, Cherokee Nitrogen, a division of N-Ren Corp., a couple of Farmland Industries plants, that imported fertilizer can be bought on the gulf coast for $10 per ton cheaper than their production costs. These products are sold in our market at a low, unfair price due to foreign government subsidy and ownership.

The American worker and family breadwinner should not continue to be subjected to further loss of jobs in our country due to subsidized imports.

Mr. Chairman and committee members, we trust and pray that this committee will use all the powers of their office to reduce and restrict the import of refined products.

Thank you, sir.

Senator **Nickles**. Thank you very much, and to all of our panelists I appreciate your interest. I'm going to ask just a couple of quick questions for all the panelists.

I've heard some say we need to do something. I didn't hear exactly what that something should be. Mr. Hall and Mr. Tell and Mr. Hancock and Mr. McGough, do you favor—I'm just going to throw out a figure of a $5 oil import fee? That's been kicked around. There's some legislation pending, I think, in both the Senate and House of Representatives that would have an import fee, I believe on crude as well as on products.

Mr. Hall.

Mr. HALL. One possible solution would be the bill that's been introduced by Representative Anthony, which provides for a tariff in the range of $5 a barrel on imported gasoline up to a certain level, and then the tariff would level if the first level of quota was exceeded.

Senator NICKLES. Is that bill strictly on products, or is that on crude as well?

Mr. HALL. Strictly on products.

Senator NICKLES. Not on crude?

Mr. HALL. Not on crude, yes.

Senator NICKLES. Mr. Tell.

Mr. TELL. Mr. Chairman, I think the first thing we must do is determine what is the minimum refining base the economic and national security of this country requires. If we are there today, we better take some pretty strong action. If present trends suggest we'll be there 2 years from now, there might be some different remedies that would be appropriate.

At a minimum, today we ought to do something with our trade laws to level the playing field. It just makes no sense whatsoever when we have the most modern refining industry in the world, representing billions of dollars of investments in jobs, as has been described, to be sacrificing that on some short-term senses of consideration.

And I would hope that we could get some prompt action from the Congress this year in the trade areas, because the existing laws don't fit subsidies in the natural resource area. I think that case is pretty clear.

Senator NICKLES. You mentioned that you support some action, enforcement, investigation or whatever on the trade laws. But what about the tariff question?

Mr. TELL. I don't think the trade laws substantively work today or procedurally. If we were to follow cases, you couldn't get there from here, and once you started, even if you could, it would take forever. It would be too late, and we better do something about the trade laws.

Whether it would be appropriate today, Mr. Chairman, to move with stronger remedies, such as tariffs or quotas, I think is a function of what we feel is the minimum refining base this country needs. My sense is that we're getting pretty close to it presently, and there's another million barrels a day of light product coming on the world markets in the next 18 to 24 months, with a high percentage of it coming here.

So whatever the base is today, you can pretty well count, because we've already been talking the problem and not working it, that the present base may well be 1 million barrels a day less by the end of 1987.

Senator NICKLES. I'm still kind of searching, though. Would you support a tariff today, or if we lose another million barrels of capacity would you support it at that time?

Mr. TELL. Well, Mr. Chairman, I think that's a policy question. If you tell me that the base today shouldn't be permitted to erode further, then you have to look at tariffs and quotas. Those are the only things that have the strength and the muscle to correct the problem.

If you tell me that the present base is fine, there's no problem, we want to take the advantages of the short-term consumer benefits, then if that's our national policy, then a tariff would be inappropriate today.

Senator NICKLES. Would a tariff or a quota be more appropriate, between the two? If you don't have a position, that's fine.

Mr. TELL. Mr. Chairman, I'm not trying to be evasive, but I think you'd have to get into the specifics as to the level and what products it applied to and how it would be administered before you could make a comparative judgment on that.

Senator NICKLES. Mr. Hall, do you have any comments on the idea between a tariff and a quota, which would be your——

Mr. HALL. First I'd like to reemphasize again the numbers that I tried to present, which are that our crude oil and natural gas liquid production that has to go through refineries is over 9 million barrels a day. And if we're going to be able to pull the strategic storage down at 4.5 million barrels a day, that suggests that we need refining capacity of 14 million barrels, which is where we are right now. So I think we've reached the place where any further erosion is a real threat to our security.

I think a tariff would be preferable because of the difficulty of administering quotas.

Senator NICKLES. OK. Thank you.

Mr. Steuart and Mr. Rathburn, I am assuming you are opposed to both.

Mr. STEUART. A fair assumption, Mr. Chairman.

Mr. RATHBURN. That's true.

Senator NICKLES. And, Mr. Hancock.

Mr. HANCOCK. Our union would support a tariff bill. Many of the other unions would also. We support the Anthony tariff bill. We also support the Natural Resource bill.

Mr. RATHBURN. We also support the National Resource bill that's been introduced by Congressman Gibbons. We also support the trade law reform bill, H.R. 1950. That's a coalition of many major corporations and all of organized labor.

Senator NICKLES. Senator Johnston.

Senator JOHNSTON. Thank you, Mr. Chairman. Mr. Chairman, I share the view that this has been an excellent panel.

I'd first of all like to invite Mr. Tell and Mr. Hall to give us some written comments, when you have a little time, as to how we might structure the minimum level of refining capacity which we want to keep in this country. I mean, it's obvious that we all think it's—or at least that I think and you agree that we are quickly approaching that point, where we're impinging on the minimum necessary. Perhaps we have already impinged on it. But what is the methodology by which we determine that and write it into a law?

I'd also like that, and like it quickly because I think we need to move quickly.

Mr. TELL. Senator Johnston, you mean the criteria that should be used in making the judgment where the minimum is? I'm not sure I understood your request.

Senator JOHNSTON. Both the criteria for that and how you would write it into law. How do you arrive at the numbers?

Mr. TELL. How would you define it in law?

Senator **Johnston**. That's right.

Mr. **Tell**. Yes, sir.

[Subsequent to the hearing, Texaco USA supplied the following information:]

J Donald Annett
Vice President

Texaco USA

1050 17th Street NW
Suite 500
Washington DC 20036

July 2, 1985

The Honorable J. Bennett Johnston
U.S. Senate
Washington, D.C. 20510

Dear Senator Johnston:

In response to your request during the hearing on product imports before the Subcommittee on Energy Regulation and Conservation on June 4, 1985, we have reviewed the issue of how one may determine minimum acceptable levels of domestic refining capacity. Attached is a short white paper which sets out Texaco's analysis of those criteria which should be considered.

We note that the definition of U.S. refining requirements does not lend itself to a straightforward "formula". However, the paper identifies a number of factors which are critical in any informed policy judgement on refinery capacity needs and the risks associated with increasing levels of petroleum product imports. Texaco believes that a current accounting of the listed factors suggests that an energy security and national security problem may exist at this point in time. We appreciate your efforts in this area, and please do not hesitate to call should you or your staff have further questions or comments.

J Donald Annett

JDA:ceh

Attachment

PETROLEUM PRODUCT IMPORTS

SUGGESTED CRITERIA TO DETERMINE MINIMUM LEVEL OF DOMESTIC REFINING CAPACITY REQUIRED TO MEET U.S. ENERGY AND NATIONAL SECURITY NEEDS

Increasing levels of petroleum product imports, combined with the unprecedented amount of U.S. refining capacity closed since 1981, have raised the question as to what is the minimum level of domestic refining capacity required to meet U.S. energy and national security needs. No consensus exists at present as to what criteria should be applied in making this determination. The many complex cost/benefit considerations involved, combined with the balancing of potentially competing policy objectives, make this a matter which cannot be reduced to a simple formula. Set forth below is an analysis and discussion of a number of matters which would appear relevant in identifying the appropriate criteria to be utilized in making this difficult judgment.

DESIRED POLICY OBJECTIVES

A determination of the minimum required level of domestic refining capacity initially turns on U.S. policy objectives with respect to the percentage of normal domestic demand desired to be covered in the event of a supply disruption. The 1973-74 and 1979 cutoffs of petroleum imports to the U.S. resulted in economic and political shocks which, as a matter of policy, the country may desire to avoid or significantly minimize in the future. The strong conservation measures adopted since 1979, however, make the demand constraint opportunities available without injury to the economy much less than in prior periods. The creation of the SPR is a reflection of these policy considerations and the U.S. without question must maintain sufficient domestic refining capacity to utilize maximum SPR withdrawals.

In addition to covering adequately domestic demand, there remains the policy question of what refining capacity above the level to satisfy the approximately 16 MMBPD of civilian demand will be required to meet incremental military needs in time of emergency. Dr. Fred C. Ikle, Under Secretary of Defense for Policy, testified in Senate Committee hearings on June 21, 1985 that DOD's average daily consumption of approximately 500,000 BPD "could increase as much as three or four times during an emergency period." He explained that "During the early stages of an emergency requiring mobilization of military forces, our petroleum consumption would increase quickly." A major military mobilization could also increase normal civilian demand as factories operate on a round-the-clock basis to meet the military's needs.

A related policy consideration is the extent to which Europe's refined product requirements might have to be supplemented from U.S. sources in the event of military action in Europe. Approximately 50 percent of Europe's petroleum product imports come from Russia and Eastern bloc nations and, therefore, create a vulnerability to political or military considerations.

IMPACT OF IMPORTS ON REGIONAL MARKETS AND SPECIFIC PRODUCT REQUIREMENTS

Determination of a prudent level for product imports involves more than simply comparing total imports to total U.S. demand. Although gasoline imports and identified gasoline blending stocks currently represent 8 percent of total U.S. gasoline demand, they represent over 15 percent of East Coast (PAD I) demand. Such level of imports is more than enough to influence the price structure of the market and create a serious threat to the region in the event alternative supplies are not available in a period of disruption.

Similarly, it is important to recognize that the U.S. has adopted product quality and environmental specifications regarding lead levels, sulfur content, etc. which prevent refined products from being completely interchangeable. A cut-off of supplies from an export refinery making products satisfying U.S. quality specifications cannot be automatically replaced with supplies from another export refinery. This is another demonstration of the vulnerability arising from the shift by the U.S. to increasing volumes of light product imports.

An analysis comparing total product imports to total refining capacity can also be misleading by failing to recognize that the various refinery units do not all make the same slate of refined products. Some refineries produce mostly asphalt; others were designed to maximize middle distillate production and others gasoline. The relevant comparison in determining the adequacy of current refining capacity should be on a product-by-product basis in terms of the adequacy of existing capacity to cover current and projected demand.

DETERMINATION OF DOMESTIC REFINING CAPACITY ACTUALLY AVAILABLE

Various categories of refining capacity are reported from time to time. The most relevant is "operable" refining capacity which includes those units which are actively processing crude oil, together with idled refining capacity which can be operating within 90 days. The best estimate of current U.S. "operable" refining capacity is approximately 15 MMBPD. Included within this amount, however, is approximately 600,000 BPD which is currently idle and, with additional passage of time, may be beyond recommissioning. The requirement for regular testing and inspection results in an average utilization of 90 percent of "operable" capacity as the best which operationally can be achieved. Accordingly, U.S. refineries currently are capable of average daily runs of approximately 14 MMBPD as compared to average daily demand of almost 16 MMBPD.

Recent studies have indicated that as much as 1 MMBPD of existing "operable" refining capacity may be at risk during the next two to three years as a result of competition from product imports from the new OPEC export refineries. Therefore, a judgment must be made as to whether U.S. energy security and national security would be adequately protected if U.S. "operable" refining capacity were to drop to a level of 14.0 MMBPD with an average daily running capability of only 12.6 MMBPD. Stated another way, would it be prudent to rely on foreign product imports of as much as 3 MMBPD together with an additional 2-3 MMBPD of crude oil imports to cover normal civilian demand?

NATIONAL SECURITY CONSIDERATIONS

The acceptability of as much as 3 MMBPD of product imports would depend, inter alia, upon (1) the security of the geographic sources of such supplies; (2) the different product composition of such imports and the capability for substitution of such products with other domestic energy supplies; (3) the nature of the ownership (private firm or government) of the export refineries upon which the U.S. has placed its product supply dependence; and (4) the likely capability of the product importer (traders, marketers and blenders vs. refiners) to arrange for an alternative supply source in the event of an international disruption. These matters are discussed more fully below:

1. Long-Haul Vs. Short-Haul Sources Of Supply

An increasing percentage of petroleum product imports come from long-haul sources as compared to the traditional Caribbean short-haul sources of the 1970's. Fifty percent (50%) of the gasoline and the identified gasoline blending stocks imported in 1984 came from Brazil, China, Romania, the UAE and Western Europe. The additional imports forecast over the next two years from OPEC export refineries will significantly increase the United States' dependence on long-haul sources. These supplies will be much more vulnerable to military and possible terrorist disruption than the short-haul product imports on which the U.S. relied in the 1970's. Time/distance considerations could also be significant during a period of international supply disruption. Shipping time from the Carribbean is a few days compared to 45 days from the Persian Gulf.

2. Ability To Substitute Other Domestic Energy Sources For Product Imports During Periods Of Disruption

In 1972, the U.S. imported 1,742,000 BPD of residual fuel oil representing 69 percent of total product imports. This amount had declined to 674,000 BPD in 1984 and represented only 34 percent of total product imports. Residual fuel oil, principally consumed by electric utilities and large industrial users, can be substituted readily with coal or natural gas in the event of curtailment. In contrast, today's product imports are predominantly the lighter transportation fuels which are not capable of subsitution by other domestic energy sources. A supply disruption in light product imports would have a much greater impact on economic and national security considerations than was the case with residual fuel oil in the 1970's.

3. Refinery Ownership By Private Firms Vs. Foreign Governments

In 1975 only 4 percent of U.S. light product imports were supplied by government-owned refineries. By 1984 the amount had risen to 36 percent. Forecast deliveries from new export refineries into the U.S. over the next two or three years could increase dependence on foreign government-owned export refineries to as much as 70 percent. Governments have a much broader agenda than private commercial firms in establishing price levels and exercising available leverage during a period of tight supplies. Foreign governments can also be expected to weigh political considerations with respect to supplying products to U.S. military forces in the event of any East-West confrontation. During the 1973-74 Arab embargo, offshore refineries supplying U.S. military forces were primarily owned by U.S. companies. This is becoming increasing less the case.

4. The Changing Character of Entities Importing Products Into The U.S.

In 1978 the major international oil companies imported 25 percent of the total light products and unfinished oils imported into the U.S. Domestic refiners and traders, marketers and blenders imported 60 percent and 15 percent of these products respectively. In 1984, the major international oil companies imported only 8 percent of the total of these products brought into the U.S. and the domestic refiners' share had dropped to a level of 41 percent. Traders, marketers and blenders imported 490,000 BPD of total light products and unfinished oils into the U.S. in 1984 representing 51 percent of total light product imports. Whether this newly dominant type of importer will have the capability of arranging for alternative sources of supply in the event of an international disruption remains undemonstrated.

ADDITIONAL FACTORS TO BE USED IN DETERMINING MINIMUM DOMESTIC REFINING CAPACITY

1. Ability To Refine Secure Sources of Crude

A formula based on the amount of current U.S. crude oil production (9 MMBPD) plus maximum SPR drawdown capability (3-3.5 MMBPD) to determine a minimum U.S. refinery capacity is much too simplistic. Such a formula would provide a supply of only 12.5 MMBPD of refined products which, combined with approximately 1.5 MMBPD of domestic natural gas liquids, would leave a supply shortfall of 1.5-2.0 MMBPD from normal civilian demand. It is highly unlikely that an international supply disruption would result in a curtailment of all crude oil imports, but the above formula would provide no increment of domestic refining capacity to process such crude imports as may be available from the Western Hemisphere and other sources. To the extent national policy dictates that some percentage of incremental military mobilization demand be covered by domestic refining capacity, the above formula, unless appropriately adjusted, would further understate U.S. minimum refining requirements.

2. "Cushion" Capacity As A Margin For Error

Once refineries have been permanently closed, the costs of maintenance and rehabilitation make it extremely difficult to ever resume operations. Accordingly, consideration should be given as to whether some small increment of capacity should be retained for policy planning purposes as a "cushion" in the event of forecast error. The complexities involved in making accurate petroleum supply/demand forecasts combined with the poor track record of prior estimates suggest it may be prudent to err on the conservative side in determining a minimum capacity level. Moreover, the upward pressure on price resulting from a precisely balanced supply/demand relationship may make the existence of such a "cushion" a benefit from a consumer standpoint. Seasonal swings in demand combined with unanticipated operating upsets, requiring unscheduled downtimes, also point to the desirability of maintaining a small increment of "cushion" capacity.

SUMMARY

The above discussion identifies a number of relevant factors to be considered in reaching a judgment on the minimum level of U.S. refining capacity to meet energy requirements and national security needs. In the final analysis, an informed judgment must be made, taking all of the above factors into consideration with appropriate weighting. No single formula would seem to be a sufficiently reliable indicator.

U.S. light product imports will be reaching levels within the next two years which are comparable to the levels reached during the periods in the 1970's when supply disruptions occurred.

The critical factors, as noted above, are the changing mix of product imports to the lighter transportation fuels combined with the shift to long-haul sources operated by foreign governments. These relationships create a much greater vulnerability from product import dependence than was the case in the 1970's.

Also significant is that further declines in domestic refining capacity will result not from normal competitive market forces but to a greater extent from raw materials and other subsidies provided by foreign governments to their export refineries as found in the recent study by the International Trade Commission. As domestic refining capacity continues to rapidly trend downward toward minimum levels, some government action at an early date is clearly indicated to prevent such unfair competition. This would help ensure that the U.S. does not unknowingly drift below minimum prudent levels and additionaly provide greater flexibility in the policy options available to protect vital energy and national security interests.

7/2/85

Senator JOHNSTON. Now I'm concerned that our record here doesn't yet properly reflect how much more dangerous it is to be dependent upon product than upon crude oil. I asked the administration about that, but let me focus in on this question of unleaded gasoline.

In 1984 the average additional cost of unleaded gasoline over leaded gasoline was about 9 cents a gallon, which when you consider all the taxes that go into the price, that's a great difference. That would suggest, does it not, that there is a great additional cost in refining unleaded gasoline over leaded gasoline? Isn't that correct?

Mr. HALL. Yes.

Mr. TELL. Correct.

Senator JOHNSTON. That would also suggest that there's a great deal of expense that goes into equipment, with expense and time in building a refinery or retrofitting a refinery for unleaded gasoline as opposed to leaded gasoline; is that correct?

Mr. HALL. Yes, sir. The $12 billion investment since 1981 while capacity was going down certainly makes your point.

Senator JOHNSTON. All right. Mr. Tell, you talked about the point that once you put these refineries in mothballs that they quickly deteriorate. What period of time are we talking about for that deterioration?

Mr. HALL. I think there are several points that should be made there. First, the workers who are trained to run that refinery disperse. The workers in Cyril, OK, I'm sure they've moved somewhere else and searched other jobs. They are not available on standby.

Second, most companies have a tendency to go in and borrow equipment off shut-down facilities. We have a big refinery, 65,000 barrels, at Buffalo, NY, and it's mothballed. But every time we need another piece of equipment and we need it in a hurry, we look to see if it's at Buffalo.

And so I think you're looking at a 6-month period almost before these refineries that are in Mr. Boggs' 15.7 can be available.

Senator JOHNSTON. All right. What happens if we allow continued deterioration of our refining capacity and we get short about, let's say, 2 million barrels a day of unleaded gasoline capacity? Now no one else in the world uses unleaded gasoline, do they?

Mr. HALL. Not at this time, no, sir. In Europe they do have some pending legislation, but to my knowledge, nowhere.

Senator JOHNSTON. Right now we're the only ones. All right. And let's say that refining capacity is located, let's say, in Saudi Arabia, in Kuwait and the Emirates over there, the Arab countries. Now if that happened, you might have seen the ad in the Washington Post today where the Organization of Arab Groups are complaining about the fact that we're giving so much to Israel.

Now suppose they said well, you're short 2 million barrels a day of unleaded gasoline and you're giving too much to Israel. All you got to do is stop what you give to Israel and we'll keep the unleaded gasoline coming; otherwise, we cut you off. What would we do?

Mr. HALL. We'd be in great difficulty, because we wouldn't have the capacity to refine. The strategic petroleum reserve would be the only thing we'd have left, and we could refine that to the extent we could, but beyond that we'd be a hostage.

Senator JOHNSTON. Well, you see, back in 1974 when the Arabs embargoed us, we could get—the oil could come around from anywhere. We could get it anywhere and put it through American refineries. There was no problem. But when you're short of product, particularly unleaded gasoline capacity, and you are the only people in the world who use that unleaded gasoline, your very national security is at stake.

Memories are very short around this place. I remember going to King Faisal in Saudi Arabia in 1974 when we were under embargo, hat in hand, you know, and said, Your Highness, won't you unleash, won't you undo the embargo? We need it and we were suffering then—suffering then very slightly compared to what we would be if we were short of unleaded gasoline capacity.

Now I'm sure that the same thing can be said of other kinds of products, can it not, as to other sort of site-specific sort of products that are refined for our market? Is that correct?

Mr. TELL. You mean where the product specifications would be unique to the U.S., Senator, beyond the unleaded?

Senator JOHNSTON. Not that unleaded is not a big enough thing. That's about what, 6 million barrels a day?

Mr. TELL. I think you've got an excellent point. I think you've made it very well with the unleaded gasoline. I'm not really sure how far beyond that you can take it.

Senator JOHNSTON. We use about 6 million barrels a day of unleaded gasoline, do we?

Mr. TELL. Excuse me?

Senator JOHNSTON. What do we use of unleaded gasoline a day in this country? Is it 6 million barrels a day?

Mr. HALL. I think it's about 3.7 million barrels a day.

Senator JOHNSTON. 3.7 million barrels a day of unleaded?

Mr. TELL. I think that's right. There may be some fuel oils with sulfur specifications, Senator, that would fit the area that you were just alluding to.

Senator JOHNSTON. But that's all the automobiles in the country, at least, isn't it? And, of course, obviously, as they keep telling us, as EPA keeps telling us, you can't put that leaded gasoline in your automobiles because it would ruin the catalytic converters. So then if we were short there there would probably be a lot of people who would be pirating leaded gasoline, ruining their catalytic converters, and ruining our capacity to deal with air pollution.

Mr. Steuart, you had your graph on the thing there, on the easel a moment ago that had the peak going up and domestic excess refining capacity—yes, thank you—along about 1981 and 1982, and then it goes down to a rather steep decline, and I wonder if that doesn't prove my point.

Mr. Hall also has his chart 22, which is a little bit of the same thing, which compares operating and refining capacity to both basic demands and potential military mobilization demand, but he goes out through 1986. Now you and he differ in that he says on 1984 that you are—in the beginning of 1984 that your about even with operating refinery capacity and basic demand.

Mr. STEUART. This is operable, Senator, and you're probably looking at operating.

Senator JOHNSTON. OK. You're operable and he's operating. But the lines would go in the same direction, and you recognize that there is a legitimate difference of opinion as to whether that operable can be reclaimed from mothballs as quickly as some might hope.

Mr. STEUART. I'll accept that, Senator.

Senator JOHNSTON. OK. So we're on the same wavelength, then, and we're going in the same direction. Now would you agree—you and he look like the slant on your lines is about the same. But would you agree that if you ran your line out from 1984 through 1985 and 1986 that you'd cross your import line there probably sometime in 1985 or 1986?

Mr. STEUART. Well, I would take the position, Senator, that much of this refinery shutdown that we're seeing that's represented by that steep line is the very inefficient refineries that have shut up, shutdown. The small refineries that came on as a result of the small refinery bias are certainly represented in that steep line.

Senator JOHNSTON. Didn't they long ago shutdown?

Mr. STEUART. Well, I think that that was occurring in 1980-forward. The steep decline that you see in 1981, 1982, and 1983 is certainly representative of a large percentage of that capacity.

Senator JOHNSTON. All those little topping plants have long ago closed in Louisiana. Now they're going to the really good refineries. I have one particular one in mind, a darn near brand-new refinery. Some of my good friends went broke at it.

Mr. STEUART. That must be Good Hope.

Senator JOHNSTON. No, not Good Hope. It's one up at Krotz Springs. But they built the finest new refinery, went broke at it because of imports, you know.

Mr. STEUART. Well, one other point that we should keep in mind is that there has been a decrease in demand during this period and that there was a large capacity coming on stream concurrent with a reduction in demand.

Senator JOHNSTON. Well, the demand is going back up now, isn't it?

Mr. STEUART. Well, my figures show that imports certainly between 1984 and the first quarter of 1985 are marginally down, Senator.

Senator JOHNSTON. But total demand is going up.

Mr. STEUART. Marginally.

Senator JOHNSTON. And the projections are, if we can believe the economic projections of this administration, the demand will go up much further. Up through 1990 I think it goes up a great deal, is my information.

Yes, by 1995 they have a demand of 20 million barrels a day and imports at 11.74 by 1994.

Mr. STEUART. Senator, I don't think we're at odds. My point in presenting this chart is to show or to demonstrate that historically we are not at the point where we should become seriously concerned about the national security issue. We seem to have come through the period from 1970-forward with a refining capacity during the early periods of the 1970's that was a negative to what imports were, your excess refining capacity.

Senator JOHNSTON. You would share the view, though, that if we did get dependent upon foreign refining capacity for unleaded gasoline that it would be a national security problem of major dimensions?

Mr. STEUART. It would cause a problem, yes, sir.

Senator JOHNSTON. And what should we do about that?

Mr. STEUART. Well, I don't have a position for that. That's a policy decision, Senator.

Senator JOHNSTON. You wouldn't agree with us policymakers if we put a tariff on based upon not getting reliant upon foreign unleaded gasoline refining capacity, would you?

Mr. STEUART. I don't think that any tariff ought to be considered until it has been concluded that there is a true national security issue at hand.

Senator JOHNSTON. Well, we agree, though, that there would be a national security issue if we were relying upon foreign unleaded gasoline refining capacity?

Mr. STEUART. I wouldn't be convinced that the tariff would be the right route to go.

Senator JOHNSTON. Well, I know, but we agree, do we not, that reliance upon foreign imported unleaded gasoline capacity would be a national security issue?

Mr. STEUART. Yes, sir, it would.

Senator JOHNSTON. OK. Then what we need to do is define what it is, how to define that, and what's the structure, and I'd invite you to also go through the same and give us the same letter that Mr. Tell and Mr. Hall will with respect to how we define when it is that we put this tariff on. Or, if you think the tariff's not the appropriate thing, tell us what would be appropriate.

Mr. STEUART. Well, we'll certainly give it every consideration, Senator Johnston.

Senator JOHNSTON. Thank you. Thank you, Mr. Chairman.

Senator NICKLES. Thank you.

Senator Ford.

Senator FORD. Thank you, Mr. Chairman.

Everybody has their own figures, I guess, but looking at the Monthly Energy Review, it indicates that production of unleaded gasoline as it now is affected by EPA is accelerating at a rapid rate. Would you all agree with that, that that part of it is beginning to accelerate at a much more rapid rate? It's gone from 4,026,000 barrels to 4,200,000 just in 3 months. And so that acceleration begins to give everybody pause for concern, I think.

We heard a lot about consumers and families from our good friend, Mr. Hancock, but, Mr. Hall, let me ask you this question. But aren't low product prices good for the consumer?

Mr. HALL. Yes, sir. But our position would be that if we had some restriction on these product imports we may see short-term minor increases in price, but we think the lesson of 1973 and 1978 is there to show us that once we become reliant on others the consumer pays a lot more.

Senator FORD. Let me continue with some questions for you, then. There have been times when the market penetration of imported products were higher than they are now, yet the refining industry remains. Why is the situation different today than it has been in the past?

Mr. HALL. I believe perhaps you're referring to the figures where the total imports have been coming down, and the misleading fact that's in that analysis is the amount of residual fuel imports. It is true that the residual fuel imports in the Nation have declined dramatically as the demand for residual fuel has come down in our country.

And I think it's very misleading for people to try to look at total imports. What we need to be looking at is total imports of transportation fuels—diesel fuel, jet fuel, gasoline—and those imports have been skyrocketing in the last 3 years.

Senator FORD. What is the extent of the major oil company control, Mr. Tell, over product prices and isn't that as likely to set the market price as import products?

Mr. TELL. Well, that's a very—I mean, the premise of the question gives me some considerable difficulty.

[Laughter.]

Senator FORD. Well, I didn't mean to make it difficult. I've been asking this particular company this question for years now.

Mr. TELL. Well, when you have a market share of 6 or 7 percent in a highly competitive marketplace with a commodity that is sold on price and a large percentage of the public probably regards as fungible, it's very difficult to think how any one company, major or independent, big or small, could arbitrarily and artificially set a price something higher than what the market would establish.

I think the key point here, the one I think Mr. Hall made, is that when you have a situation of a very competitive market and a commodity that is generally regarded as fungible, it's that new entrant trying to access the market by coming in underneath the existing price structure and the present suppliers wanting to hold share and resisting that entrant and bringing their price down to the lower level that has a big impact.

And that's what we see today. Although the volume of light product imports may not be large as a percentage of total, although in the Northeast it's now approaching 15 to 20 percent, it's more than enough when it's coming in under the existing price structure to set the price level for the whole marketplace, and that ripples then not only to the Northeast but back down to the gulf coast.

So to view the impact to the margins in the industry as being just limited to those volumes that are coming in would be terribly misleading. They're coming in on a subsidized basis. They're coming in to undercut the existing price structure. The domestic refiner is trying to hold share. He's cutting his margins and he's now to the point where he doesn't have a margin. He finally backs off and the new entrant comes in, and that's why we have plant closings.

And it's that process that's accelerating and is going to explode, where we have this additional million barrels of light product coming on from these OPEC export refineries. The ability of the domestic refining industry to hold on financially in those circumstances becomes just very, very much in doubt.

Senator FORD. I can understand the 20 to 25 percent in the Northeast much better than I can the 7 percent that they would control the market, but I understand what you're saying. And the toehold is there, and it's beginning to accelerate, and we find what Mr. Hancock is saying—that refineries are closed down.

Mr. Hall, let me ask you this question. I was extremely disturbed this morning earlier when Mr. Boggs said that there had been no conversation between his department and the Department of Defense as it related to how much capacity is needed as it relates to the defense posture of this country. He seemed to think well, we'll look at that tomorrow if it becomes a problem, or we'll look at it a couple years down the pike if that becomes a problem.

Listening to you here this morning indicates that we are already there, and if Mr. Boggs was including the mothballed refineries in his capacity—and we all assume that he did—then we're at the razors edge today. Other than just where you need a part for your other refinery and you would raid a closeddown or mothballed refinery, what other problems would there be as it relates to bringing a refinery out of mothballs after it's been shutdown for a period of time?

Mr. HALL. Well, one factor would be you've got to restore the inventories, which in a time of shortage would, of course, work against what you were trying to do. For example, a 60,000-barrel refinery, you'd probably need to put 600,000 to 1 million barrels of inventory back into that plant in order to operate it.

Another factor is to train workers, being able to find those people, bring them back, get a team established that can run a refinery and run it safely. And then, of course, we have the factor of rust and deterioration that occurs in units of this type when they're idle.

Now all of those factors lead us to say that we think you're looking at a minimum of 3 months, and more likely 6, to put a mothballed refinery back on stream, and that after it's been down for 2 years you may not ever be able to get it back on.

Mr. TELL. Senator Ford.

Senator FORD. Because you don't have a startup to run it during that 2-year period, to keep it in good running condition, I guess.

Mr. TELL. I would certainly support everything that Mr. Hall has said, and if it would be helpful, Texaco has prepared a paper analyzing the problems associated with mothballing and starting up. We have closed five refineries. We've done a lot of mothballing at all five, and from that experience did develop a paper which, if it would be helpful to the committee, we would certainly be pleased to submit for the record.

Senator FORD. Mr. Chairman, I would ask that Mr. Tell's report on mothballing be included in the record.

Senator NICKLES. Without objection, so ordered.

[The information referred to follows:]

PROTECTION AND START-UP

OF

IDLE PETROLEUM REFINING EQUIPMENT

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SUMMARY

The declining demand together with an increase in imported petroleum products has resulted in shutting down more than 100 domestic refineries since 1980. Five Texaco refineries are included. As a result of these closures, a great deal of experience has been gained in developing mothballing and maintenance procedures for idle equipment. These closures have also provided an opportunity to observe the rate of decay and gather information on the costs and problems of restarting or relocating idle equipment.

The refineries upon which this discussion is based are: (1) an 80 MBPD refinery at Lockport, IL that has been idle for four years; (2) a 50 MBPD refinery at Tulsa, OK that was idle one year before restarting and (3) a 22 MBPD refinery at Casper, WY that has been idle three years. Two process units at the Lockport Refinery were relocated to other plants after being idle two and one-half years.

The mothballing procedures were selected based on those most cost effective in maximizing protection at the least cost. They were not selected to maximize protection for extended periods.

The mothballing costs are $30 to $50 per barrel of capacity or about $3,000,000 for a medium-size refinery. Continuing expenses to maintain the mothballed status and satisfy environmental requirements are about $1,500,000 a year or $20 a year per barrel of capacity.

A significant amount of maintenance and testing is required when an idle plant is restarted. Even with adequate mothballing, internal and external corrosion will be experienced. This corrosion damage and cost to repair increases significantly with time. Repair costs for a medium-size refinery idle for less than one year will be about $5,000,000 and increase to $32,000,000 if idle in excess of two years.

Many problems will be encountered when restarting an idle refinery other than repair costs. Supervisory and operating work force must be recruited and trained, maintenance contracts developed, catalyst and chemicals purchased all of which take time. Environmental permits may have elapsed and be difficult, expensive and time consuming to obtain. It will take a minimum of four months to restart a refinery idle one year to as much as eight months when idle in excess of two years, excluding any delays resulting from permits, availability of utilities and delivery of critical catalyst and chemicals.

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SECTION I PROTECTION OF IDLE EQUIPMENT (MOTHBALLING)

A. GENERAL

The declining demand for petroleum products in the U.S., together with a surge in the volume of imported finished and partially refined product, has resulted in the idling of more than 100 U.S. refineries since 1980. Because of these closings, the "mothballing" of shutdown plants has become an important activity in the refining business. This paper will discuss the general methods of mothballing a refinery and also provide some insight on the requirements to restart a plant which has been out of service.

B. DURATION

The purpose of mothballing is to preserve the equipment for future start-up or relocation. The first thing to be done is to decide the time interval that the equipment is to be protected. The cost of the mothballing is, of course, directly related to the length of that interval and management may not wish to spend funds to protect equipment for which there is no known future use. Mothballing can be done for any of the following three general time intervals:

(1) Less than one year;
(2) One to two years; and
(3) More than two years.

For less than one year's protection, mothballing could consist of steaming, water washing, and gas blanketing the equipment. In addition, protection against freezing of water by eliminating it or by maintaining enclosed areas such as control rooms at above freezing temperatures.

For one to two years protection, some cleaning of corrosive materials from equipment would be required plus a coating of the interiors of piping and vessels with a suitable sweet distillate. Pyrophoric materials must be removed from equipment and disposed of in a safe manner. Rotating equipment must be protected, probably in place.

For more than two years protection, extensive removal and cleaning of equipment, together with protective coatings, would be required. Insulation will deteriorate to a serious extent and can cause corrosion of piping and vessels. If the plant is in a damp climate, consideration should be given to removing it. Major rotating elements should be removed, cleaned, and properly stored. Protection for this longer interval requires major expenditures and has to be fully justified.

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C. BASIC PROTECTION PROCEDURES

The general requirements of mothballing will be covered in nine groups:

(1) Towers, Vessels and Exchangers -- These can be steamed, washed and cleaned of pyrophoric materials. They should then have an interior coating of light cycle gas oil. Austenitic steel equipment must be protected against stress corrosion by neutralizing chlorides and sulfides.

(2) Mechanical Equipment -- Rotating mechanical equipment should be cleaned and filled with oil and drained. Bearings should be filled with suitable lube oil and left full. All rotating equipment must be turned periodically to prevent shaft set. Reciprocating pumps should have both steam and product ends filled with oil. Fans and blowers should be filled with oil and drained. All crank cases should be flushed and filled with clean lube oil. Water jackets must be drained to prevent freezing.

(3) Instruments and Electrical Instrumentation -- These need to be carefully drained to assure that no water is left in the meter leads or equipment. Electrical equipment must be isolated and, in some cases, equipment must be kept energized to protect against corrosion. Extensive drying out and coating of electrical motors will be required prior to start-up.

(4) Insulation and Steam Tracing -- A very careful blowing of steam tracing systems is required at shutdown. Some cutting of the tubing at low spots will probably be required. This is important because replacement of tracing usually requires replacement of insulation which is both time-consuming and expensive.

Insulation will weather and start to fall apart in about one year. In three to four years, complete removal will probably be required. Since insulations installed prior to 1970 probably contain asbestos, special cleanup and disposal procedures which are slow and expensive are required.

(5) Tankage -- Tanks should be pumped to the lowest level possible and can then be left without further work. Pressure and vacuum relief valve discs should be removed to prevent sticking or freezing. Underground lines should be blown with nitrogen to remove all product possible. Long term protection of tankage would

require coating with a preservative. All steam coils must be blown to prevent freezing. Care must be taken to prevent floating empty tanks during rain storms.

(6) Heaters -- The most important thing in heater protection is to prevent moisture from entering the fire box. Stacks should be capped and all openings closed and sealed to the extent possible. Tubes should be decoked at shutdown and filled with gas oil and drained.

(7) Cooling Towers -- Wood cooling towers are exposed to rot while they are shut down. Some treatment of wood can be done but must be considered on a cost basis. Fan gear boxes should be flushed and filled with clean lube oil. Fans must be secured to prevent windmilling. The greatest hazard to idle cooling towers is accidental fire while they are dry.

(8) Boilers and Steam Systems -- Steam systems should be shut down and put into dry storage. The most important thing is to seal the boilers against moisture by capping stacks and sealing all openings to fire boxes. Desiccant should be placed in steam drums to absorb moisture. The desiccant should be renewed periodically. Great care must be taken to remove water in low spots in steam lines to prevent freezing.

(9) Buildings and Offsites -- All water systems must be drained to prevent freezing. Buildings should be sealed and locked to prevent pilferage and moisture problems. Heating systems must be drained and blown dry. Piping must be drained and purged with nitrogen to protect low spots from freezing.

D. MAINTENANCE OF PROTECTION

Once the refinery is mothballed, proper maintenance of the facility must continue to insure that the equipment can be recommissioned at a future date. This requires checking to be sure water or other liquids are not being introduced from outside sources, watching for wind and storm damage, maintaining the fire protection systems, turning rotating equipment periodically to prevent shaft set, repairing leaks, and other similar work to assure that the equipment is preserved for restarting.

E. MAINTENANCE OF ENVIRONMENTAL REQUIREMENTS

A major area of work in a shutdown plant is meeting environmental regulations. The need to insure that all hazardous materials are adequately managed requires significant expenditures of money and time. Asbestos insulation will deteriorate in about a year and must be removed as required to prevent its entering the atmosphere. The permanent closing of areas containing toxic materials must be performed in conformance with governmental regulations. It is normal to continue the operation of waste water treating units to handle runoff from shutdown plants. In general, environmental problems require significant managerial attention and ongoing expenditures for a shutdown refinery.

Periodically, protective oil coating will have to be renewed. This will start about two years after the initial application.

One item of importance is the need to maintain records of equipment removed for use elsewhere. If this is done to any extent, start-up time and costs will be greatly increased.

In summary, the mothballing of a refinery is an expensive operation which must be carefully planned to meet the objective of the program. A shutdown plant requires continued maintenance to assure that it is adequately protected and to meet environmental needs. The longer the refinery is down, the larger the problems become in maintaining it in a condition that would permit restarting. In time, some equipment will no doubt require complete replacement.

F. COSTS -- MOTHBALL, MAINTENANCE & ENVIRONMENTAL

The cost to mothball a medium-sized refinery for a one to two-year period will be in the range of $3,000,000. For protecting for an extended period, this figure could easily be doubled. Also, if the refinery is located on the Gulf Coast, costs will be somewhat larger because of the corrosive atmosphere.

Care-taking costs for a medium-sized refinery (50,000-100,000 BPD) will vary with the degree of mothballing and costs to satisfy environmental regulations. Direct costs could be in the range of $1,500,000 per year plus the costs for insurance and taxes. This amount reflects only nominal costs to maintain environmental requirements. If major clean-up such as wholesale stripping of asbestos is required, the costs will be greater. Depending on the extent of contamination, final environmental costs could range as high as $30,000,000.

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SECTION II REFURBISHING IDLE EQUIPMENT

A. GENERAL

Idle refining equipment must be cleaned, inspected and repaired prior to re-use in order that its reliability and safety can be demonstrated. The extent of refurbishing requirements will be a function of (1) the effort expended in the initial protective measures as well as the level of maintenance of the protected state of the equipment during the idle period; (2) the duration the equipment has been idle; (3) the climatic conditions and level of industrial activity of the locality and (4) to some extent, the type of processing equipment involved.

The effort expended in protecting equipment can vary from no planned protection to keeping the equipment warm under an inert atmosphere ready for immediate start-up. No planned protection will result in significant damage to austenitic steel and equipment containing corrosive materials almost immediately. Damage beyond the point of reasonable repair costs could occur in as little as one year. On the other extreme of protection, i.e., keeping equipment warm, clean, under an inert atmosphere, test running rotating equipment and operating and testing electrical instrument and safety equipment routinely could maintain refinery process equipment in good operating conditions for extended periods of time. The cost of this level of readiness would be prohibitive and could approach twenty percent of normal operating and maintenance costs of the facility.

A more reasonable approach and the one discussed earlier can maintain equipment in a useable state for several years at relatively modest initial cost together with a continuing maintenance cost. This approach, however, will require a significant expenditure to refurbish equipment to a reliable and safe operating condition and require several months to a year to place in operation.

The geographic area of idle equipment is a significant factor in the cost and length of time it can be maintained in a useable condition. In the Gulf Coast area with the damp and salty atmosphere and often a high concentration of industrial facilities, it is probably not feasible to maintain equipment more than five years. On the other hand, in a rural area such as Wyoming that has a dry atmosphere, process equipment could probably be maintained economically for ten years or more.

Inspection and refurbishing requirements are discussed in the following sections and a summary of anticipated costs is presented in Appendix I./These requirements are based on experience with a 50 MBPD refinery in Tulsa, Oklahoma that was idle for one year prior to being re-started and a Sulfuric Acid Alkylation Unit and a Delayed Coking Unit relocated from Illinois to other refineries after being idle for two and one-half years.

B. VESSELS

Vessels that were flushed on shutdown and oil-coated were generally in good condition and required few repairs. These vessels were inspected internally and rust scale was water flushed. Pressure safety devices were tested. The only major repairs required were to the shell of a large crude fractionating column that was damaged during the protection activities following shutdown. Although not repaired initially, the tray gaskets on the VPS vacuum tower leaked badly and effected tower operation. Subsequently, a shutdown was required to make those repairs.

C. EXCHANGERS

The refinery idle for one year was re-started without extensive inspection and ultimately required repairs or retubing to 10% of the heat exchange equipment. On the equipment idle for two and one-half years, shell and tube exchangers and fin fan air coolers were dismantled, cleaned, inspected and reassembled with new gaskets. Extensive damage was observed on 40% of the bundles and required expensive retubing. Although this equipment was oil coated, it was not individually dismantled and cleaned when shut down and damage occurred from corrosion from deposits on the tubes. Several air coolers had to be retubed as deposits left in the tubes when shutdown hardened and could not be cleaned with normal cleaning procedures.

D. PIPING

Accumulations of rust scale in piping was evident and required extensive flushing. During flushing operations, scale would tend to plug control valves and exchangers and required dismantling for cleaning. Scale was much more extensive on the units idle for two and one-half years than on the one idle for one year. Except for steam and water lines, all piping was hydrostatic tested. Most piping was found to be in adequate conditions for reuse with only a small percentage requiring replacement due to internal corrosion. No effort was made to protect external surfaces and some corrosion was evident but not extensive except for areas around insulated pipe, where insulation covering was not tight. Extensive external corrosion can be expected on insulated piping after three or four years especially in a damp climate.

About 90% of the valves in hydrocarbon or chemical service required repacking and 10% required repairs or replacement on the equipment idle two and one-half years. The refinery idle one year required very little valve work.

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E. ROTATING EQUIPMENT

The rotating equipment idle for one year was restarted without extensive inspection. Repairs were made as problems were encountered. About 15% of the pumps required seal and bearing replacement. The Alkylation Unit refrigeration compressor ran poorly with high vibration. It had to be dismantled and repaired. The problem was caused by accumulations of rust scale from piping inside the compressor case.

Pumps were in relatively good condition after two and one-half years. Damage to cooling jackets and impellers due to freezing was experienced on about 10% of the pumps. Pitting and corrosion on bearings was evident and mechanical seals and packing were dried and cracked. All pumps were dismantled and repaired as required, complete with bearing and seal replacement.

Mechanical turbine covers were removed and inspected internally, cleaned as required and reassembled with new steam packing.

Large compressors were dismantled, inspected and repaired as required. Little damage was observed that could be attributed to the idle condition. Most repairs were due to normal wear of seals, valves and rings. In one case, however, a compressor seal oil system became contaminated with water that caused extensive damage from corrosion and freezing and was completely replaced.

Motor drives were tested by running uncoupled and 50% required repairs varying from bearing replacement to complete retreating.

F. ELECTRICAL EQUIPMENT

Electrical distribution equipment including transformers, switch gear and cable were in good condition in the refinery that was idle for one year. Equipment idle for two and one-half years was also in relatively good condition but somewhat dirty. All equipment was thoroughly cleaned, inspected, calibrated and tested before reuse.

G. INSTRUMENTATION

The only maintenance process instruments received was adjustments and calibration during the start-up operations. Many instruments were inoperative and out of calibration. This resulted in frequent delays in the start-up. It would have been cost effective to completely test and loop check the instruments before reuse.

Control valves were handled this way and also resulted in frequent delays while repairs were made. Pre-calibration and testing will be done in the future.

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H. STEAM TRACING AND INSULATION

Vessel insulation was in relatively good condition with only minor repairs required. Although piping insulation was reused, it had been damaged extensively and resulted in expensive repairs, particularly to steam-traced piping as many tracers leaked and required replacement which also required insulation replacement. Many steam traps were inoperative and much of the small bore steam piping had leaks that required repairs. Most steam tracing problems were attributed to freeze-ups resulting from inadequate protective measures taken when the equipment was shut down.

Future protection procedures will include a more thorough treatment of steam-tracing. If the pipe insulation is asbestos and the equipment is expected to be idle more than two years, the piping insulation should be removed at shutdown and replaced at start-up. This is particularly true for plants located in a damp Gulf Coast area and even with non-asbestos insulation as external surfaces will corrode under damp insulation. When insulation is removed, the piping should be protected with a coat of primer.

I. STEAM BOILERS

The boilers at the plant restarted after one year had been fired with natural gas and relatively good quality refinery gas. As a result, very little gas side corrosion from fuel born sulfur and metals was experienced. The boilers were successfully restarted with little refurbishing.

However, boilers that used bunker fuel with moderate to high levels of sulfur and metals can expect to be seriously damaged in as little as one year. Air pre-heaters and breeching will accumulate highly-corrosive combustion deposits from this fuel and when idle, will corrode rapidly. It is extremely difficult to remove or neutralize these deposits. Extensive and time-consuming repairs should be expected if boilers that burn these fuels are restarted after being idle for one year or more.

SECTION III START-UP OF IDLE REFINING EQUIPMENT

A. CRUDE SUPPLY AND PRODUCT MARKETS

When the decision is made to start-up an idle refinery, it is assumed that an adequate and secure crude supply has been arranged and that a market for products exists or will be developed by the time the plant is in operation. Methods of crude handling must be reviewed. If by water, then existing dock facilities are assumed to be adequate. If by pipeline, available pipeline capacity must be confirmed and contracts arranged. It is possible the pipeline company has contracted the capacity formerly used by the plant to other refiners. A similar review of the product distribution facilities will be required.

B. RECRUITING AND TRAINING OF A WORK FORCE

The size and experience of the company planning to operate the plant will have a significant effect on the difficulty in recruiting and training a work force.

If it is a new owner with little refining experience, the nucleus of the organization required to operate a refinery including managers, supervisors and technical personnel who already have these skills must first be recruited. This could be a difficult problem and at best would require several months before recruiting and training of a work force could begin.

If the operator was an existing independent refiner who has one or more operating refineries, this nucleus could be transferred or loaned and recruiting and training could start immediately.

If the operator was a large refiner with many operating refineries and the former operator of the plant, many of the former supervisors and technical people who operated the plant will still be employed and could be transferred or loaned and start-up could begin with a minimal amount of training of new semi-skilled workers.

Another variable in the difficulty of obtaining a qualified work force is the length of time the refinery was idle. If less than one year, many of the former workers would be available in the area for immediate hiring. Start-up of the Tulsa Refinery utilized over 50% of the experienced operators from the former owner. If the plant was idle for two or more years, few if any former workers would be available.

C. DEVELOP MAINTENANCE CONTRACTS

The most expeditious method of handling the refurbishing and running maintenance requirements is with contracted maintenance. It would take one or two months to develop a bidder's list, obtain competitive bids, select and execute maintenance contracts. In cases where a significant amount of refurbishing required a large initial work force, it would take an additional month for a contractor to move into a plant and build up the work force.

D. RESTOCK STOREHOUSE

It is assumed that consumable materials and spare parts required for the plant were disposed of when the plant was shut down. If so, it would take one to two months to restock enough material to support the refurbishing and start-up efforts. An adequate supply of spare parts for mechanical equipment will take somewhat longer but should not delay start-up efforts.

E. PURCHASE CATALYST AND CHEMICALS

Fluid cracking, reforming and hydrotreating catalyst requirements will require significant expenditures and several months to acquire. FCCU catalyst is readily available and could be delivered in a few weeks. Reforming, and to a lesser degree hydrotreating catalyst, could take much longer. These catalysts are normally available in six to eight weeks. However, if there is a sudden large increase in demand resulting from a national emergency, it could take six months or longer to satisfy everyone's catalyst requirements.

Most refining chemicals are readily available and should require only a few weeks to procure. Arrangements to reprocess spent sulfuric acid from Alkylation Units could be a problem in some areas, particularly if the acid plant that was formerly used shut down along with the refinery.

F. COMMISSION UTILITY SYSTEMS

Refiners require large quantities of water for cooling and boiler feed water. The sources of water supplies are quite varied. Common sources include purchase from local water districts, diversion from canals or rivers, ground water wells and even sewage plant effluent. These sources must be reviewed when restarting as diversion permits or water rights may have expired, been reallocated or sold and contracts from local water districts may not be renewable.

Purchased natural gas and electric power contracts will need renewal and in some cases require new metering or other distribution facilities. If new facilities are required, it could be a significant unplanned expenditure and require several months to complete.

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Steam generation facilities are the first operating equipment to be placed in service when starting a refinery. Steam is required for driving fire water pumps and utility steam for cleaning and steaming out process vessels and piping in preparation for start-up. Steam is also required for boiler feed water treating and heating requirements. It may be expeditious to provide temporary boilers for these steam requirements in order to shorten unit start-up schedules. This temporary boiler procedure was used successfully at the Tulsa Refinery that was restarted after one year.

G. START-UP PROCESS UNITS

Once the appropriate level of inspection, testing and repairing has been completed, an operating crew hired and trained and the utility system commissioned, the commissioning and start-up of process units can begin.

A refinery of average complexity will have a Crude and Vacuum Pipe Still (VPS), a Fluid Catalytic Cracking Unit (FCCU), an Alkylation Unit, Catalytic Reforming Unit (CRU), a Hydrotreating Unit (HTU), and a Sulfur Recovery Unit (SRU) along with tankage and product blending, testing and shipping facilities.

The first unit to start will be the VPS in order to provide intermediate product for feed to several units including the FCCU. The FCCU would follow as soon as adequate feedstock was accumulated in the intermediate product tankage. The SRU would start with the FCCU in order to handle the sulfur. The CRU/HTU would follow along with the Alkylation Unit. Timing of these start-ups is important as very little intermediate product storage is normally available. This is particularly important with products requiring pressure storage such as butanes, butylenes and isobutanes from the FCCU and CRU.

The requirements for the various process units to start in a very short interval due to limited intermediate product storage underscores the importance of a thorough refurbishing and inspection in order that the units will run reliably. Extended delays of one of the downstream units result in the need to shut down upstream units as storage becomes full. Attempting to start unreliable equipment would be unwise as it is likely to result in further damage to equipment, loss of valuable product and subject employes to unwarranted hazards.

Normally it takes one to ten days, depending on its complexity, to start-up an individual process unit and up to two weeks for a refinery of the complexity discussed here. Start-up following an extended shutdown, even with a thorough refurbishing effort, can be expected to take much longer. In the case of the Tulsa Refinery, it took six weeks for the process unit start-ups following commissioning of the utility and steam-generating equipment.

H. ENVIRONMENTAL FACILITIES

Equipment installed to meet environmental regulations include oily-water separators, air and gas floatation units, biological treating facilities, solid waste handling equipment, sour water strippers, vapor recovery compressors, smokeless flares as well as process designs that control air emissions. These facilities would be started along with the process units they serve.

Although those facilities were adequate to meet environmental regulations at the time the plant was shut down, it is likely that they would not be adequate at such time as the plant is to be restarted. Emission limits are becoming much more restrictive and are changing rapidly. It can be expected that significant investments in new environmental equipment will be required, especially if the plant had been idle for several years. Such costs for a 75,000 BPD refinery could be two to five million dollars each year the plant was idle.

In addition to the requirements of new regulations, there are many problems associated with the idle status of the plant. For example, existing permits may have expired or regulatory agencies may require the plant to come under New Source Review regulations rather than existing facility regulations formerly used. Additionally, some of the permitted emissions may have traded for permits in another plant. Environmental considerations could have a very negative effect on the ability to start-up an idle plant even to the point of making it impossible to accomplish in a timely and cost-effective manner.

APPENDIX I

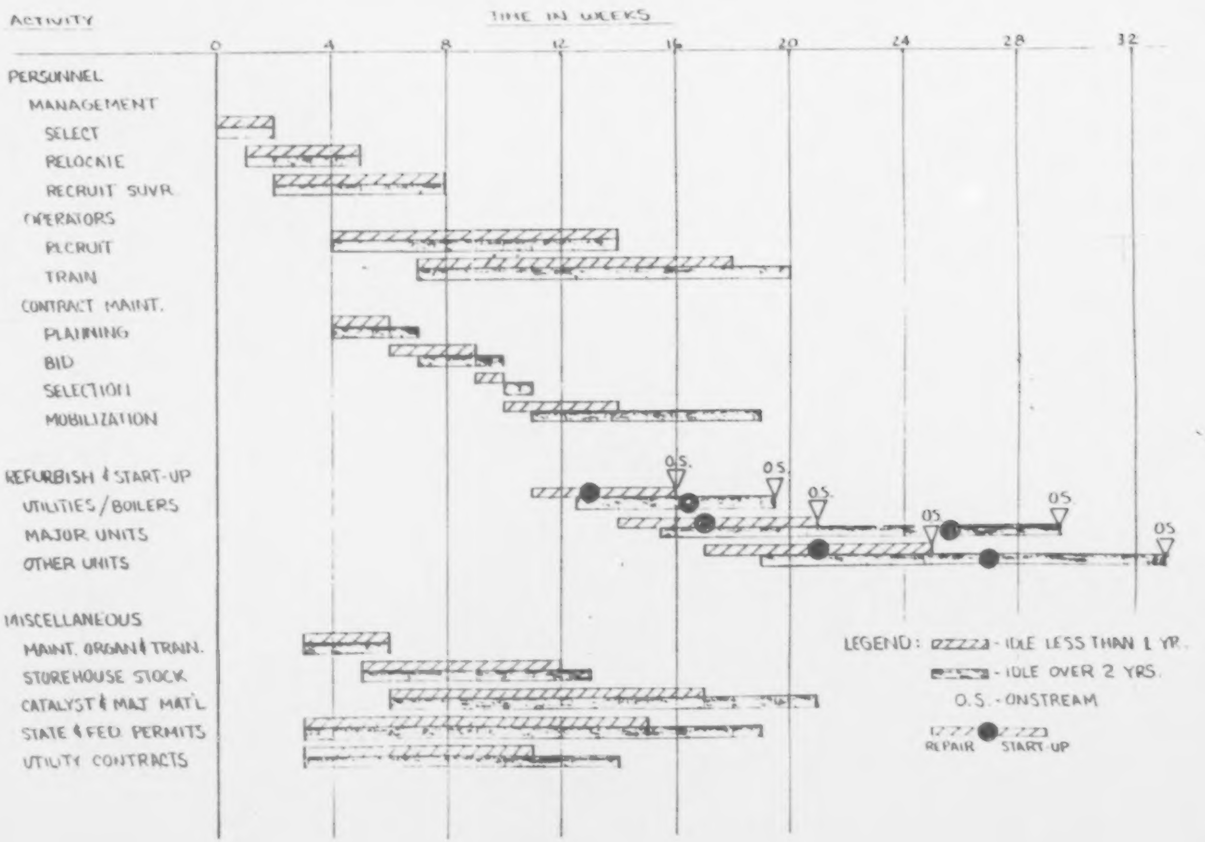
COST TO REFURBISH

IDLE REFINING FACILITIES

	DURATION OF SHUTDOWN (IN YEARS)		
	(1)	(1-2)	(Over 2 Yrs)
Piping & Valves	$ 545,000	$1,500,000	$2,500,000
Vessels	420,000	1,250,000	1,750,000
Exchangers	600,000	1,950,000	2,650,000
Rotating Equipment	300,000	2,000,000	2,500,000
Heaters	100,000	470,000	1,100,000
Electrical	80,000	250,000	500,000
Instrumentation	360,000	610,000	1,000,000
Insulation	500,000	990,000	9,000,000
Steam Tracing	200,000	300,000	400,000
Painting	200,000	400,000	4,000,000
Cooling Towers	120,000	180,000	1,200,000
Tankage	1,000,000	1,500,000	2,500,000
Miscellaneous	575,000	1,100,000	2,900,000
TOTAL	$5,000,000	$12,300,000	$32,000,000
Cost per Daily Barrel of Capacity	$65-100	$165-250	$425-640

Note: Above based on 50 to 75,000 BPD Refinery of average complexity located in a moderate to damp climate.

APPENDIX
IDLE REFINERY START-UP SCHEDULE



APPENDIX III

START UP EXPENSE

	Less Than 1 Year	More Than 2 Years
Security	$ 85,000	$ 140,000
Relocate Management Team	300,000	300,000
Recruit Key Supervisors	200,000	200,000
Management & Supervisors' Salary	660,000	1,080,000
Recruit Operators	40,000	40,000
Operator Wages	1,125,000	2,250,000
Contractor Mobilization	50,000	50,000
Permits	50,000	50,000
Repair and Inspection (Appendix I)	5,000,000	32,000,000
Transportation	40,000	70,000
Catalyst & Chemicals	3,650,000	3,650,000
Storehouse Stock	1,500,000	1,500,000
Fuel & Power	630,000	1,260,000
Miscellaneous	1,170,000	4,410,000
Total	$14,500,000	$47,000,000

Senator **Ford**. I thank the chairman for that.

One thing, in closing, Mr. Chairman, that disturbs me considerably, we talk about other countries subsidizing their products, country-owned, that sort of thing. Then I read where we're a part of funding those constructions, those operations. We even go so far as to loan the money to buy the bulldozers and the tractors and the big shovels and that sort of thing so that other countries can extract their coal and bring it into this country and sell it under us, and we're funding them to displace our workers here.

There is something about that that just gnaws at my gut, and I don't like it. And at some point I think we're going to have to look at this total structure, particularly as it relates to foreign aid and how we get the money into other countries to give them the capacity to displace us.

Now that's not any part of a trade barrier, I guess, or tariffs or that sort of thing. It's a policy and procedure of this country. And I think it reflects directly and I'm sure Mr. Steuart might have other ideas about tariffs and quotas and that sort of thing, but I listened to the panel, which is extremely good, this morning, and they talk about Japan, who will not allow anything into their country—gasoline or whatever it might be—yet they're 98 percent dependent.

Why can they do it and flourish and we sit here and we're the only vulnerable country of the whole bunch? We're the only real purchaser and we keep on, as the fellow says, you nibble on your thumb, first thing you know, you're eating on your shoulder. And I don't particularly like what I see happening to us.

I thank the chairman.

Senator **Nickles**. Thank you, Senator Ford.

Senator Rockefeller.

Senator **Rockefeller**. Thank you, Mr. Chairman. I'll be brief.

I strongly associate myself with the comments of the Senator from Kentucky, the senior Senator from Kentucky. It is something that I would hope we as a committee would get into more as we go along, this whole question of indirect aid through either foreign aid directly or Export-Import Bank loans, grants or whatever that we as a nation are, through our policies overseas, allowing therefore other countries to underbid us and underprice us, outsell us, take away our jobs, and we come back and talk about tariffs, ad valorem barriers, import fees, quotas, all kinds of other things.

And we may be exacerbating our own problem in a whole other area—that is, foreign assistance, Export-Import Bank—without giving it a close analysis. I think we have to, not only in the area of construction of oil and gas, but coal and all the rest of it.

I would just simply make one point because our hour is late. We all have caucuses to go to, and you have been very patient, Mr. Chairman, as has our panel, and there's another one to come yet.

Mr. Hall, you said on page 4 of your testimony, you listed a series of circumstances and you said "We believe this practice constitutes a clear subsidy." Now I've heard some discussion this morning from Mr. Tell and others that it's very hard to get the trade laws to work to your advantage, even to the point, Mr. Tell, that I would guess that you are rather fatalistic about that ever coming to be.

That is, that the time and the expense that would be caused by implementing that action would be so long that you might choose to avoid even taking the action in the first place, or placing that action in effect.

To Mr. Hall I would say if there is a clear subsidy, in your judgment, then I would have to assume that you believe you have a case. You clearly point out that there's a danger, and you invoke national security, with which I agree. And so why can't you then use effectively for your purposes our trade laws?

Mr. HALL. As I understand it, sir, one of the criteria for the trade laws is that the product not be sold into our country at a price that's lower than the price in the exporting country. In the case of Mexico, for example, that doesn't apply. If they've got their crude oil price at $10 a barrel and after refining costs they're selling gasoline for $13 or $14 a barrel, if they ship that gasoline here and undercut our market, they're not dumping under the term of our laws, because they're not selling it here for less than what they sell it for in their own country.

And that's the problem, the reason the trade laws won't work in this particular situation.

Senator ROCKEFELLER. So that then, going back to Commissioner Stern's chart, it would only be in the case of Canada, among all those countries, where you could get this kind of a countervailing situation. All the others, by definition, would rule themselves out.

Mr. HALL. Well, again if the measure is the price of the product in that country versus the price in this country, as long as they're going to keep the raw material lower in their own country the antidumping provision won't work.

Senator ROCKEFELLER. So when you or Mr. Tell or others talk about reforming—you don't think, therefore, you by definition rule out winning a trade case?

Mr. HALL. Yes, sir, at this point.

Senator ROCKEFELLER. You wouldn't bring one because you'd lose it under the rules of the game?

Mr. HALL. Under the antidumping rules, as I understand it, we would lose it, yes.

Senator ROCKEFELLER. Now you've suggested bringing an ad valorem matter, an ad valorem tariff of 10.8 percent, right, or at least that's in the Anthony bill and you're supportive of that?

Mr. HALL. Yes.

Senator ROCKEFELLER. Would you consider, do you think it's too much or too late or impossible or unlikely to reform the trade laws so as not to reflect, to box you out?

Mr. HALL. My concern would be that this is an urgent situation, as I see it.

Senator ROCKEFELLER. No time?

Mr. HALL. The decline in demand for petroleum products has run its course. Demand is now flat. Most of the inefficient refineries have gone. All these products are coming at us and we're already on the razor's edge from a national security point of view, and I would be concerned that rewriting the trade laws will take years and wouldn't be able to respond quickly enough to the problem.

Mr. TELL. May I comment just briefly on that, Senator Rockefeller? I agree with Mr. Hall that the situation is urgent today. I do, however, think that it would be most useful for Congress this year to quickly move to redress the trade laws and make them workable. I think it would send a very salutory signal to the rest of the world that we're not going to tolerate these kind of below-cost, subsidized, unfair competition.

If you had the substantive and the procedural elements of the trade laws brought up to date and made workable with respect to subsidies in the natural resource area, it might also provide a basis for our trade negotiators to work out voluntary agreements.

So I share Mr. Hall's view that the trade laws will not probably represent the full and complete solution, and unfortunately there will be time lags involved, but I still very much feel it's an effort we ought to undertake this year.

Senator ROCKEFELLER. Would either of you gentlemen consider constructively a Btu import fee based on Btu's, which could cover a variety of oil, gas and coal, for example?

Mr. HALL. In the case of the petroleum industry, if it applies equally to crude oil and products it would not necessarily deal directly with our refining problem. So I would say a measure like that, if you want it as a revenue raiser, perhaps, as a policy you might want to consider it, but as a solution to our problem of imported products, it would not be a solution.

Senator ROCKEFELLER. It would not be helpful. Would you agree with that, Mr. Tell?

Mr. TELL. Well, my comment would be that I think we should be very careful not to artificially distort interfuel competition so that you would favor petroleum over coal or coal over petroleum or electricity over natural gas. I mean, I think that's one of the things you have to be sensitive to if you're getting into the tariff area.

Now if we're talking about just gasoline, where there is not competitive fuel interchangeability, that consideration certainly wouldn't be present in the way that it would be if you were talking distillate or fuel oil or even crude, for that matter.

Senator ROCKEFELLER. Thank you. Thank you, Mr. Chairman.

Senator NICKLES. Thank you very much, Senator Rockefeller.

To our panelists, we appreciate your input and I apologize to some extent that we of necessity had to hurry through. Thank you very much.

On our next and final panel we have Mr. Urvan Sternfels, president of the National Petroleum Refiners Association; Mr. Tom Van Arsdall, vice president, National Council of Farmer Cooperatives; Mr. Jack Griffith, Griffith Petroleum, Stillwater, OK; and Edwin Rothschild, assistant director, Citizen/Labor Energy Coalition.

Mr. Sternfels, please proceed. And to all of our panelists, I apologize for the fact that you're the final panel and meetings have already started, and for that reason several members of the committee had to leave. But I think it would be more appropriate to finish the hearing than try and have you wait around and then reconvene. It might be more difficult and we expect several votes on the floor today. I think it may just be more appropriate to try and finish the hearing.

Mr. Sternfels; please proceed.

STATEMENT OF URVAN R. STERNFELS, PRESIDENT, NATIONAL PETROLEUM REFINERS ASSOCIATION

Mr. **STERNFELS**. Thank you, Mr. Chairman. I appreciate your perserverence as well as your courtesy in allowing us an opportunity to conclude this hearing today and appear before you and discuss what I consider and my members consider an extremely important issue facing the manufacturing segment of the refining industry.

I am Urvan Sternfels. I am the president of the National Petroleum Refiners Association, which is a group dating back originally to 1902, representing most of the refining and much of the petrochemical industry in the United States today. The membership has a great deal in common. The principal thing is that they use crude oil and its derivatives as their raw materials.

The association has struggled with this subject mightily. As you can imagine, there are many different views, some of which are controversial areas of concern and contention within the industry as a whole, within our membership certainly. So I come before you today principally to apprise you of the concern of the majority of our members, a large majority of our members, with the growing dependence and growth of the product imports coming into the United States from many sources throughout the world, principally in the areas of gasoline and other light petroleum products.

I have submitted in addition to my statement, which was submitted earlier, several pieces of paper containing graphs detailing refining capacity, gasoline imports, and light product imports. I think it's important to note, as has been represented at this table here this morning, that the trend in total imports is not the significant issue here. The trend in light products, particularly gasoline and gasoline blending materials, is what is at issue.

And that is critical because in most cases most refiners in this country have invested tremendous amounts of money to improve and enhance the quality of the gasoline, partially to offset, or, rather, to acknowledge the requirements of unleaded gasoline, but other quality considerations as well, and that is where the bulk of investment has gone in the refining industry in recent years. And this is the area of investment that has been particularly threatened by the growth of imports.

The charts that I have given you contain several figures. The last two tables detail total gasoline imports as a percentage of light product imports. I think it is interesting to note that the area between 1984 and 1985 shows a percentage of 29.3 in 1984, and we estimate a percentage over a third of the amount of light imports of gasoline will be gasoline imports from overseas. And the problem here is that when you take a look at this in terms of gasoline demand you see figures of 5.7 percent, 6.0 percent, and total percentage of gasoline demand, of total gasoline imports, and these are derived from EIA figures.

We don't believe these are representative of the true situation, but it's difficult from the data that's available from the Government to determine what the true picture is because not all of the imports are totally identified. In some cases, it's been documented that there are misdeclarations.

In other words, some products that are brought in are not used for the purposes stated. This is for obvious reasons of evading tariffs, higher tariffs and so on. And in some cases people's circumstances change. But the data is not sufficient to really determine what the true picture is.

I believe Mr. Boggs and Senator Ford referred to the fact that somewhere between 8 to 10 percent of the gasoline used in the country today is being imported. We think this trend is going to continue and principally for the short term I think it's going to continue because some of the requirements of the Environmental Protection Agency, one of those involves the subject of lead rights, which are sold or accrued basically by importing as well as producing unleaded or, rather, leaded gasoline.

When leaded gasoline is brought into the country, the importer acquires a right until the end of the year to use more lead up to the maximum permissible limit in leaded gasoline, that he may either use that later or he may sell it to someone. Those rights, we understand, go for up to 4 cents a gram in terms of lead in the current marketplace, and we are concerned that this is an incentive for importers who really were not the beneficiaries that were intended to gain anything other than money out of this for this program.

Let me say this differently. The program was intended to benefit refining organizations who had invested money to essentially allow a trading of the ability to refine unleaded gasoline during a period when EPA was drawing down lead more precipitously than they had permitted earlier, and they did it rather quickly. And this was to allow time for adjustment and also to maximize utilization of what lead is available and what capacity is available to make unleaded gasoline.

This benefit has been extended to importers as well, who have no investment, and basically they will either apply this benefit to further imports of leaded gasoline, and let me point out that the incentive exists now to import as much leaded material at low lead levels as possible for them, and later sell those rights to either a refiner that can use them or use them themself to import leaded gasoline when EPA ultimately reduces the lead volume to a very small amount.

We think that's one reason why leaded gasoline will come in in greater quantities within the next 6 months. Also, refiners, by virtue of EPA regulations, will be required to meet lower lead levels. When they do so, they will reduce the volume of gasoline that they will be able to produce for two reasons: first, because they must process more extensively that material which they put in their plants; and, second, because they will have to back out the very low level octane material in many refineries in order to meet the high octane unleaded requirements.

Now I would like to just leave you with a few points—I see my time is nearly up—that concern us as an organization. We believe that because of the difficulties refiners are encountering today, and many of them are precipitated by Government policies—environmental costs, programs, and other restrictions—that I don't think the refiners have any competitive activity in. That is, they are not less efficient. They have been made less efficient in terms of their operating costs by many Government policies, and we think that message should be clearly recognized.

We also believe that the Government in some form, probably this committee as well as others, should enable themselves to find some way to present a clear expression of national resolve that the U.S. Government will not interfere, will not allow foreign entities to cause the demise of the domestic refining industry.

We think that the Government needs to clean up the existing tariff and import limitations that exist today, both in respect to the laws and the terms of the policies that are implemented by the Customs folks in bringing them in. A good example is ethyl alcohol that is slipping in in manners which the Congress did not intend.

I hope the statement that I have submitted, which contains a number of suggestions, some of which are more controversial than others with our own membership, as well as, I am sure, within the field of your own membership, will be considered for purposes of rectifying what we think is a very serious problem.

I thank you for your time.

[The prepared statement of Mr. Sternfels follows:]

NATIONAL PETROLEUM REFINERS ASSOCIATION

SUITE 1000
1899 L STREET, N.W.
WASHINGTON, D.C. 20036

STATEMENT OF
NATIONAL PETROLEUM REFINERS ASSOCIATION

URVAN R. STERNFELS, PRESIDENT

BEFORE THE

SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION

UNITED STATES SENATE

JUNE 4, 1985

NATIONAL PETROLEUM REFINERS ASSOCIATION
Founded 1902
SUITE 1000, 1899 L STREET, N.W. WASHINGTON, D.C. 20036
TELEPHONE (202) 457-0480

Products Imports Policy Statement

The National Petroleum Refiners Association, as the major trade organization representing both the domestic refining and petrochemical manufacturing industries, must register its concern with the accelerated rate at which refineries in the United States have been shut down in the last several years and the prospects for a continuation of this unhealthy trend in the foreseeable future. Since 1981, nearly 130 refineries, comprising over three million barrels per day of capacity, have ceased operations. Further loss of domestic refining capacity, if unchecked, has grave implications for the economic well-being and national security of the nation.

This country has long been dependent on crude oil imports for a sizeable portion of its energy needs. Relatively minor disruptions in the recent past have caused havoc in very sensitive areas of our economy. A rapid shift of dependence to the importation of petroleum products, particularly light products such as motor gasoline, is underway and promises to render this nation more vulnerable to the threat of energy disruptions of even greater proportions. If the erosion of the domestic refining industry is allowed to continue unimpeded, our vital energy needs will no longer be met within our borders, or by our friendly neighbors. The very purpose of maintaining the Strategic Petroleum Reserve, intended as a buffer against a crude oil import disruption, would be materially impaired if domestic refining capacity continues to dwindle.

The U.S. is a preferred marketplace for foreign products because of a very strong currency and a large appetite for consumer products. There has been very little recognition by the government of the importance of a viable domestic refining industry. United States policy does not restrict foreign refineries from exporting petroleum products to us. Indeed, legislation was proposed in the last session of Congress to make importation of products even easier, through amending existing tariffs.

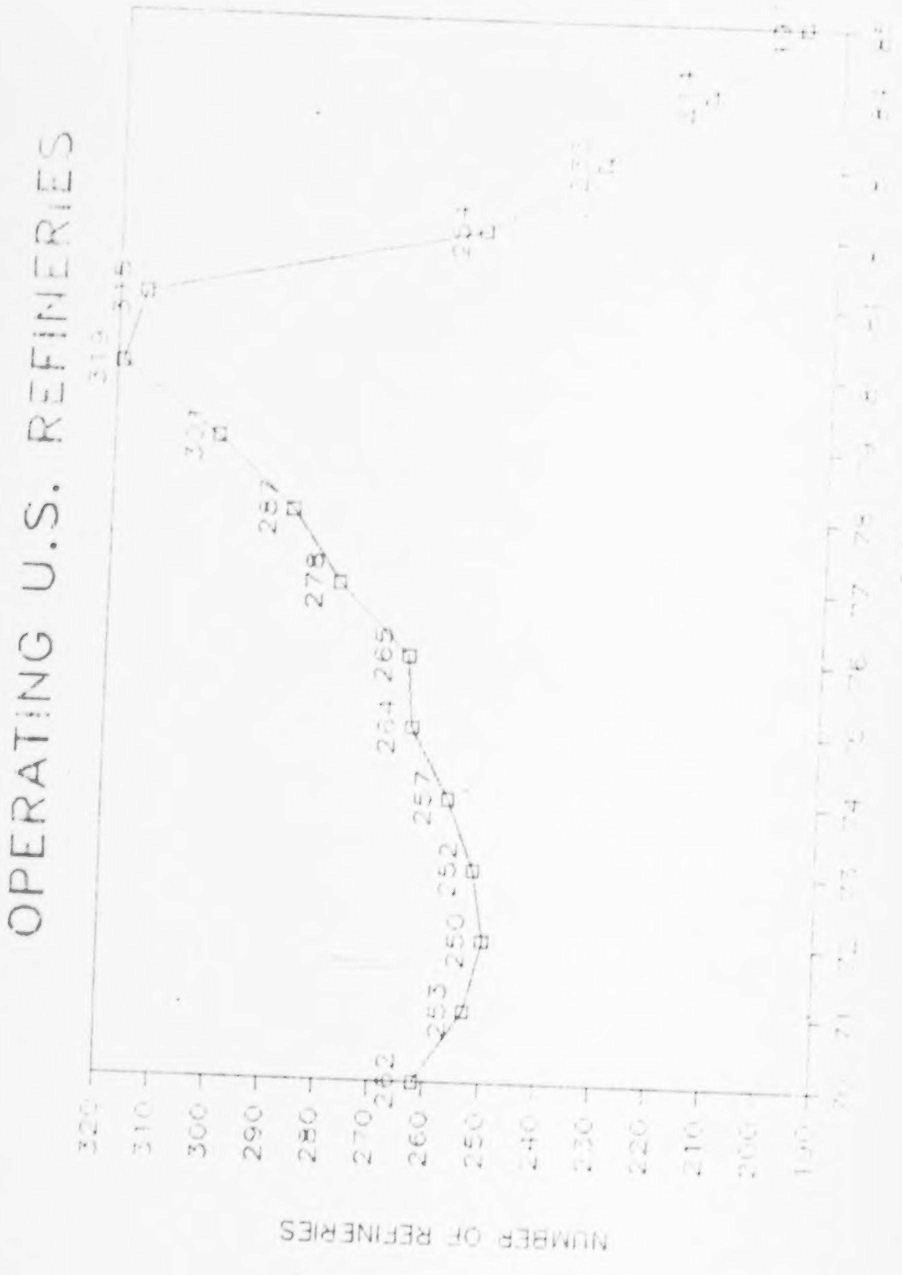
We think it should be recognized that many of the continuing difficulties encountered by domestic refiners have been created by U.S. Government policy. It is essential that the United States government send a clear message that future policy will assure that our domestic refining capacity will not be allowed to decline below a level dangerous to national security. Therefore, the following is recommended:

- Our import control system must be examined in light of a multiplicity of import restrictions in Europe, Japan, and other marketplaces for petroleum products so that U.S. refiners are not unfairly disadvantaged.

- The U.S. Government must review tariff levels and clarify existing tariffs on naphtha, gasoline, gasoline blending stocks, and alcohol to insure that these products enter into the U.S. at duty rates which the Congress intends. In the course of such a review, access to foreign petrochemical feedstocks should be maintained at current tariff levels.

- The U.S. Customs service should act in assuring tighter, more effective and consistent enforcement of tariff schedules with increased surveillance of imported product specifications to assure that the proper tariff rate is applied.

- Some combination of increased tariffs and quotas might ultimately be implemented, dictated by national objectives, with the goal of maintaining a secure domestic refining industry.


OPERATING U.S. REFINERIES
NUMBER OF REFINERIES
YEAR
320
310
300
290
280
270
260
250
240
230
220
210
200
190
70
71
72
73
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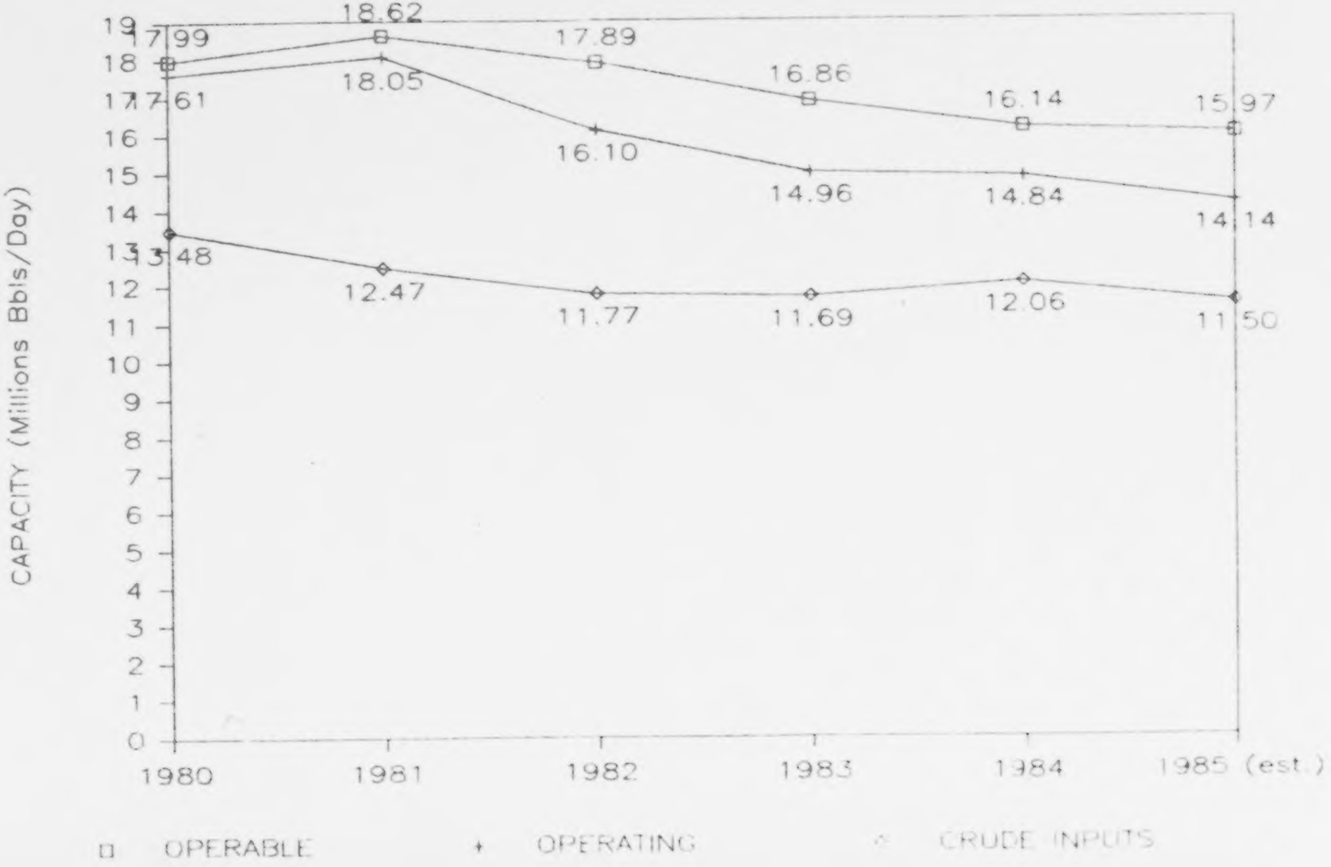
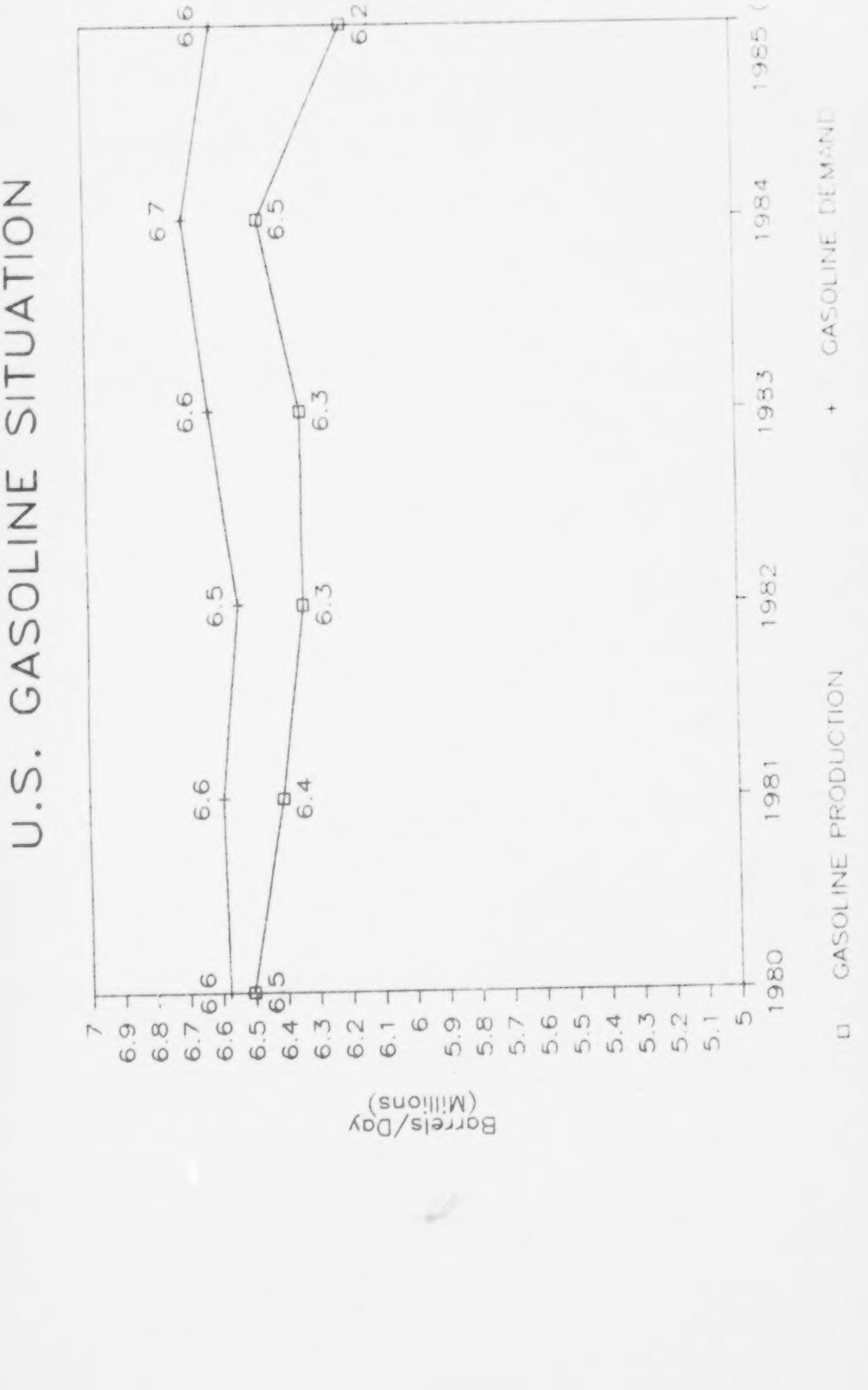
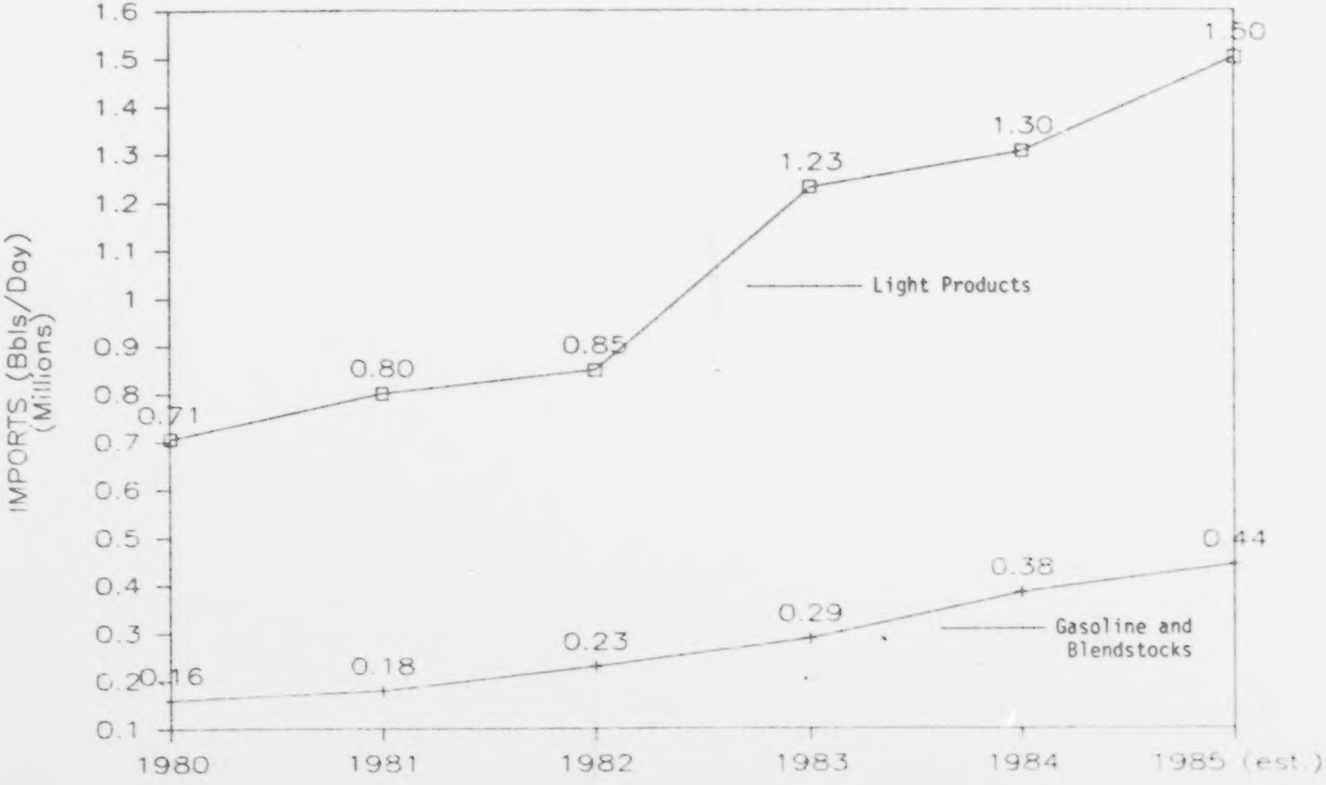


U.S. REFINERY CAPACITY

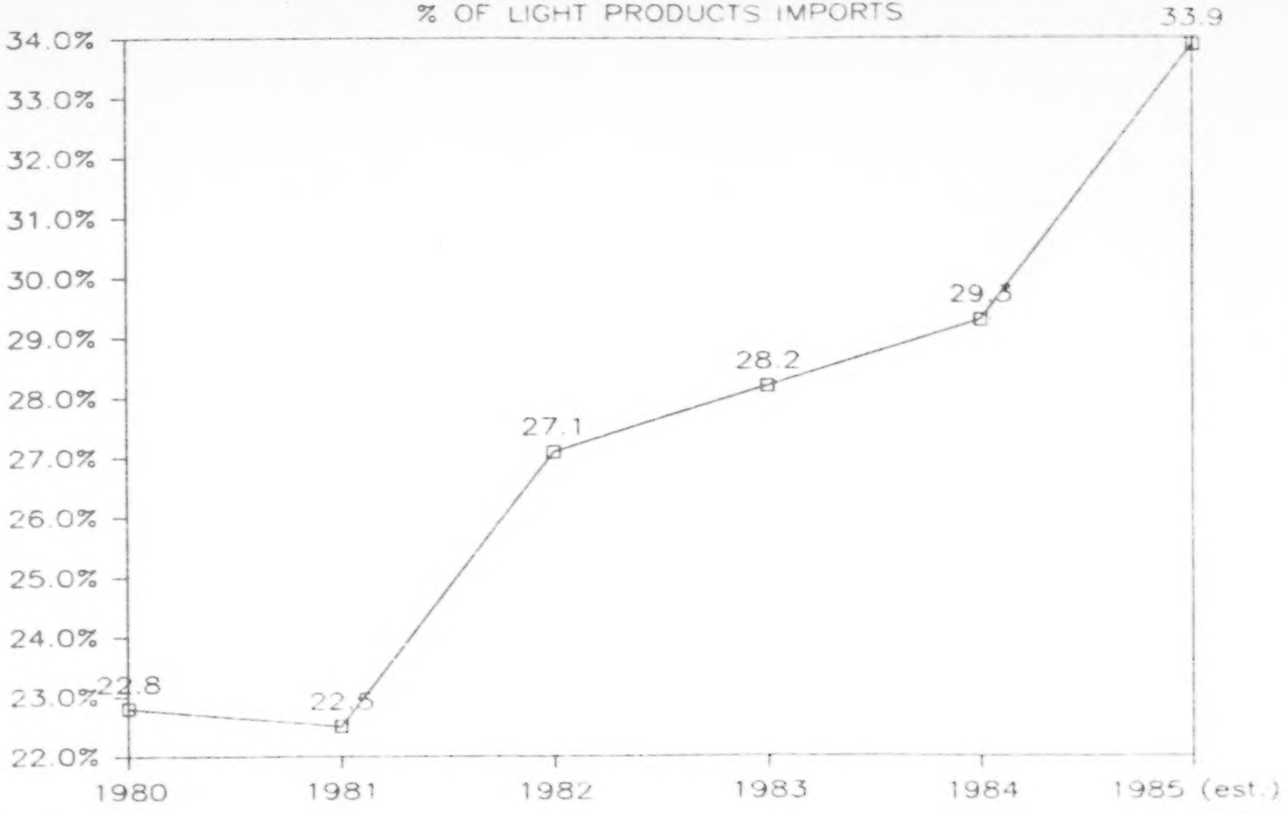

U.S. GASOLINE SITUATION
Barrels/Day (Millions)
7
6.9
6.8
6.7
6.6
6.5
6.4
6.3
6.2
6.1
6
5.9
5.8
5.7
5.6
5.5
5.4
5.3
5.2
5.1
5
1980
1981
1982
1983
1984
1985 (est.)
6.6
6.6
6.5
6.6
6.7
6.6
6.5
6.4
6.3
6.3
6.5
6.2
□ GASOLINE PRODUCTION
+ GASOLINE DEMAND

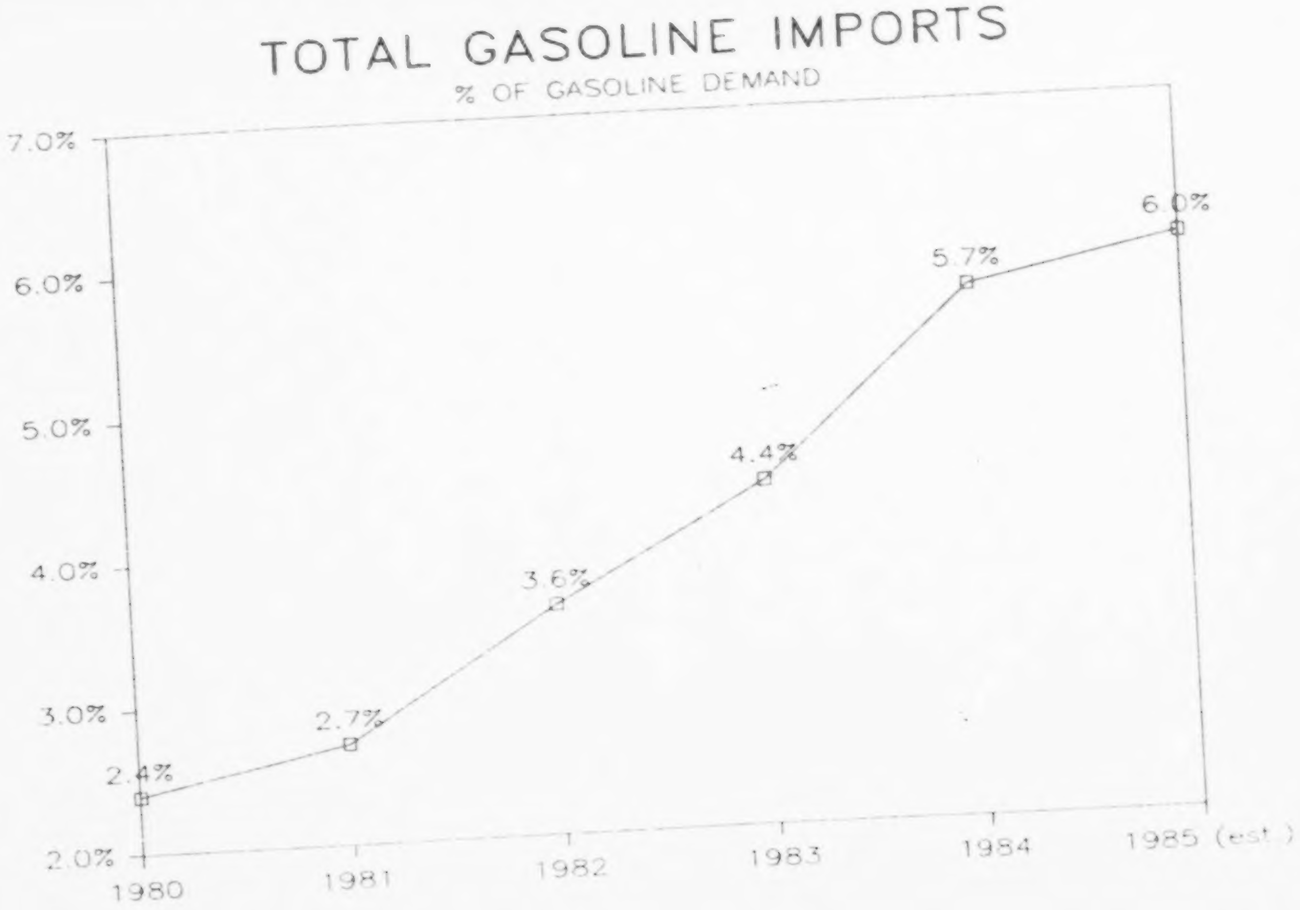
IMPORTS OF LIGHT REFINED PRODUCTS



TOTAL GASOLINE IMPORTS

% OF LIGHT PRODUCTS IMPORTS




TOTAL GASOLINE IMPORTS
% OF GASOLINE DEMAND
7.0%
6.0%
5.0%
4.0%
3.0%
2.0%
2.4%
2.7%
3.6%
4.4%
5.7%
6.0%
1980
1981
1982
1983
1984
1985 (est.)

Senator NICKLES. Thank you very much, Mr. Sternfels. We appreciate your suggestions.

Mr. Van Arsdall.

STATEMENT OF R. THOMAS VAN ARSDALL, VICE PRESIDENT, AGRICULTURAL INPUTS AND SERVICES, NATIONAL COUNCIL OF FARMER COOPERATIVES

Mr. VAN ARSDALL. Thank you, Mr. Chairman. You have our full statement for the record.

The focus of our testimony today goes one step beyond the impact of imported petroleum products on the domestic petroleum industry and the issue of fair trade to consideration of the implications of such developments for the security of agriculture's fuel supplies in future emergencies, and indeed our national and economic security.

This hearing really deals with a new and more immediate factor in the emergency preparedness equation, which possesses the potential of disarming the SPR and turning this imposing strategic weapon into the next Maginot Line. The posing question would be will expansions of government-owned refineries in oil-producing countries displace sufficient domestic refining capacity so that we will be unable to convert our own domestic crude production, plus our SPR, into vitally needed products for agriculture and the economy in the next emergency.

An important subset of this question more directly germane to our own interest as agriculture is will the cooperative petroleum refining and distribution system be impacted. We supply about 40 percent of the farm market presently through that system. Cooperative refiners are generally more vulnerable to subsidized petroleum product imports than the major oil companies because they have the ability for a time to offset refining losses through crude oil earnings.

Not only do we not have crude oil earnings, but we don't have any earnings in agriculture at the moment to offset such losses either. If increased product imports were to force farmer-owned refineries to shut down, then the traditional role of cooperative refineries as a principal source for the cooperative marketing and distribution system in rural areas would be replaced by dependence on imported products and the product spot market. These sources dry up during a disruption.

If cooperative marketers and in turn their farmer members were to lose part of all of their fuel supplies at critical planting or harvest time, for example, in the next oil emergency, a fuel shortage could quickly degenerate into a food crisis of far greater magnitude.

Now our own analysis has been limited at best. It's raised as many questions as answers. But what we have learned leaves us deeply concerned. The potential stakes are so high that this question deserves the fullest investigation on an expedited basis by this subcommittee and other appropriate policy bodies in Government.

The debate thus far seems to have been focused on whether product imports will or will not increase significantly. One consideration is increasingly coming into focus. If product imports continue to increase, displacing domestic refining capacity, a threshold will be crossed at some point which would place our Nation under the threat of a new kind of vulnerability.

Yet, as several members of this subcommittee have already stated so well, a more critical question needs to be addressed satisfactorily first before you can get to the other questions effectively. What is that national security threshold? Now at a minimum that point would logically seem to lie above an equilibrium between operational domestic refining capacity, as compared with domestic crude oil production, plus SPR drawdown capacity.

In closing, we would urge those charged with the responsibility of answering these questions to avoid letting short-term political considerations such as the desire to keep energy issues low profile distort their analysis. Our citizens need and deserve the best pragmatic answers available.

The National Council's member cooperatives are farmer owned. We have endured through two oil emergencies with farm fuel prices and shortages. We are not anxious to see mistakes of the past repeated needlessly in the next foreign oil cutoff.

Thank you.

[The prepared statement of Mr. Van Arsdall follows:]

National
Council of
Farmer
Cooperatives

BEFORE THE
Subcommittee on Energy Regulation and Conservation
OF THE
Committee on Energy and Natural Resources
United States Senate
Washington, D.C.

HEARING ON IMPACT OF IMPORTED PETROLEUM PRODUCTS ON THE DOMESTIC PETROLEUM INDUSTRY

STATEMENT OF
R. THOMAS VAN ARSDALL
VICE PRESIDENT, AGRICULTURAL INPUTS AND SERVICES
NATIONAL COUNCIL OF FARMER COOPERATIVES

June 4, 1985

1800 Massachusetts
Avenue, Northwest
Washington, DC 20036
202/659-1525

Serving America's Family Farmers

Before the
Subcommittee on Energy Regulation and Conservation
of the
Committee on Energy and Natural Resources
U.S. Senate
Washington, D.C.

Hearing on Impact of Imported Petroleum Products on the Domestic Petroleum Industry

Mr. Chairman and Members of the Subcommittee, my name is R. Thomas Van Arsdall, and I am Vice President of Agricultural Inputs and Services with the National Council of Farmer Cooperatives. I commend the Subcommittee for holding this timely hearing on a very important issue, and am pleased to have the opportunity to share the National Council's views.

The focus of our testimony today goes one step beyond the impact of imported petroleum products on the domestic petroleum industry, to a consideration of the implications of such developments for the security of U.S. agriculture's fuel supplies in future emergencies, and indeed our national and economic security.

INTEREST OF THE NATIONAL COUNCIL

The National Council of Farmer Cooperatives is an association of cooperative businesses which are owned and controlled by farmers. Our membership includes 107 major marketing and farm supply cooperatives, the 37 banks of the cooperative Farm Credit System, and 32 state councils of farmer cooperatives. The National Council represents about 90 percent of the 6,100 local farmer cooperatives in the nation, with a combined membership of nearly two million farmers.

The National Council has been heavily involved in national policy debate concerning energy emergency preparedness for the past 12 years. Our commitment to the development and maintenance of responsible emergency preparedness policies hinges upon a fundamental relationship which underlies agriculture's unique ties to its energy inputs. Simply stated, U.S. **agriculture must have uninterrupted access to equitably-priced supplies of petroleum fuels**, in order to assure dependable supplies of food and natural fiber for the nation and the world.

Timing is critical in agricultural operations, with needs subject to the dictates of biological processes and the vagaries of nature. Agriculture, as opposed to industrial operations, cannot make up for lost production at a later date. A disruption of even short duration at the wrong time can result in crop losses for an entire year. Yet agriculture is perhaps most vulnerable to disruptions, as it lies at the end of petroleum supply lines. Past disruptions have been felt first and most acutely in rural areas.

It is this **combination of need and vulnerability** that led **farmers**, through their cooperatives, to **invest in their own petroleum supply and distribution systems** over the past half century. Today, supply cooperatives own and operate five efficient refineries possessing an aggregate production capacity of 337,700 barrels per stream day. Farmer cooperatives market petroleum products in more than 40 states and supply almost 45% of all on-farm fuel and a large portion of rural system needs.

The cooperative petroleum system represents the only segment of the oil industry in which the **consumers of its products are also its owners.** This feature carries with it not only a **unique accountability** in terms of commitment of supply, service and price, but also a **unique institutional perspective and sensitivity**--borne of the painful experiences of two oil supply disruptions in the last decade--to this nation's energy security.

LESSONS FROM THE PAST

History has demonstrated that a relatively minor supply disruption can generate long gasoline lines, crisis-driven price increases and devastating macro-economic consequences. For example, during the Iranian disruption in 1979, there was no actual decrease in the U.S. level of crude oil imports. Yet inventory adjustments reflecting perceived shortages led to supply disruptions and a 180-percent increase in crude oil prices.

It is estimated that the adverse economic effects of the 1979 disruption alone resulted in oil price increases that forced farmers to pay as much as $5 billion more annually for their petroleum fuels through 1983. Even though prices declined last year, much of this legacy still remains.

SPR RESPONSE

The U.S. has responded to two damaging crude oil disruptions over the past decade by moving to fill the Strategic Petroleum Reserve (SPR) with more than 460 million barrels of crude oil to date. The National Council has been and continues to be an outspoken advocate of diligence in filling the SPR, and in developing policies for its timely and effective use.

The U.S. Department of Energy (DOE) has stated that, at current levels of petroleum imports, the SPR now has sufficient **crude oil** inventory to offset a total cutoff of petroleum imports for more than 90 days. However, U.S. **consumers require petroleum products**--gasoline, diesel fuel, heating oil--not crude oil. To risk overstating the obvious, **refineries are necessary** to accomplish that conversion. Therefore, it would seem that the declaration by DOE carries with it a vital, implicit assumption that sufficient domestic refining capacity is available to convert the SPR crude oil into needed products accessible to end use markets on a timely basis during an emergency. That assumption may be valid today. However, will it still be valid tomorrow?

A NEW VULNERABILITY?

The National Council is growing increasingly concerned that the ability of this nation to deal with future energy emergencies could be diminished significantly as a result of **rising petroleum product imports**. An analysis of import data over the last four years demonstrates an accelerated growth in imports of both finished and unfinished petroleum products, particularly gasoline. The fact that new refineries are coming on stream in oil producing nations, with others under construction or planned, make it likely that this trend will continue.

Increasing product imports may contribute to downward pressure on fuel prices in the short term. Any fuel cost savings, when examined in isolation, certainly represent welcome news to hard-pressed farmers. However, closer assessment within a larger context identifies potential **short-run and long-run costs** to agriculture of much greater magnitude, particularly in a tight or disrupted market.

Product Imports Adversely Impact U.S. Refiners:

To the extent that product imports exacerbate the current depression in the domestic refining industry, farmer-owned cooperative refineries are also impacted. The refining sector, both U.S. and world-wide, has been going through an extremely difficult adjustment period, in which surplus capacity has been shut down in order to reach a new equilibrium of supply and demand.

A steadily growing volume of petroleum product imports has exacerbated this adjustment process for the U.S. refining sector. The strong U.S. dollar has combined with other key characteristics of the international oil market to effectively deny U.S. refiners access to product export markets, while making the U.S. the most lucrative market for petroleum products in the eyes of overseas refiners. Foreign governments have not hesitated to subsidize products from their "national" refineries in order to penetrate the U.S. market.

Implications for Co-op Petroleum System:

Major oil companies are able to offset refining losses for considerable periods through their earnings from crude oil production and other investments. Cooperative refiners by definition are crude deficient and generally do not have other earnings with which to weather such refining losses. The agricultural economy is going through its own severe economic crisis, and certainly has no reserves from other sources to offset refining losses.

The National Council would point out that farmer-owned cooperative refiners are **not** competitively disadvantaged because of technological obsolescence, inefficiency or low productivity. These refineries have high yields of gasoline, diesel fuel and heating oil amounting to 85-90 percent of their refined products, and have invested millions of dollars to maintain efficient operations. Cooperative refiners on average are more efficient than the norm for major refiners, in both fuel efficiency and cash operating costs.

Regional cooperatives which have been hard hit in other areas can ill afford concurrent losses in their refining operations. In the extreme, this could mean a shutdown of one or more cooperative refineries. A total of $675 million in cooperative refinery assets (hardware only) is potentially at risk. The impact of a major write-off could be devastating for economically weakened cooperatives and their farmer-owners.

If the import trend continues and cooperative refineries are forced to shut down, then the traditional role of cooperative refiners as a principal source for the cooperative marketing and distribution system in rural areas would be replaced by dependence on **imported products and a volatile spot market. These sources dry up during a shortage.**

Major oil companies are not well positioned to fill the void, as they have continued to withdraw from rural America. Indeed, there is real question as to whether SPR crude oil could be refined and moved to all rural markets on a timely basis during an emergency, absent the cooperative refining system.

If cooperative petroleum marketers, and in turn their farmer-members, were to lose part or all of their fuel supplies in the next oil emergency, a fuel shortage could quickly degenerate into a food crisis of far greater magnitude.

WILL PRODUCT IMPORTS REDUCE SPR EFFECTIVENESS?

One critical question has emerged which goes far beyond the issue of the survival of the domestic refining industry, and which demands serious debate within the nation's energy policy community:

- **Will petroleum product imports displace sufficient domestic refining capacity to jeopardize the effectiveness of the SPR?**

The complex forces underlying increasing product imports are examined in detail by several other witnesses. Regardless of the causes, the National Council is concerned that should product imports continue to increase, the trend could lead to an over-dependence on imported products--creating a **new kind of vulnerability** that could again result in gasoline lines and disruption-driven price shocks in the next emergency.

Disruptions in the past have curtailed crude oil supplies. Supply disruptions of the future may also cut off finished petroleum products used in agriculture, transportation, home heating, industry and defense. The SPR could still be utilized effectively in response to either type of disruption, assuming that sufficient domestic refining capacity is available and positioned to serve all market segments.

THE ISSUE OF "FAIR" TRADE

If the economic survival of an American industry in the face of foreign competition were the only issue being debated, then one could argue--as some have-- that the problem should be addressed solely under trade remedies. Then the burden would be similar to that presently faced by a number of other U.S. industries: proving whether the root cause of the threat involves "unfair" trade practices by foreign competitors.

In the case of the refining industry, the particular problem would involve the use of dual pricing of crude oil by governments in producing nations as a natural resource subsidy for export products from their refineries. At stake would be jobs and the investment base of an important cog in our national economy--certainly no small consideration. As stated earler, farmer cooperatives and their member-owners have a great deal at risk in this regard. And we are convinced that unfair trade practices by foreign governments have contributed materially to the skewed pricing structure which has led to increased petroleum product imports penetrating the U.S. market.

However, in the case of this nation's oil supply lines, the debate must transcend the traditional arguments regarding whether the practices of foreign competitors are "fair" or "unfair". In no other industry have we experienced two foreign embargoes which curtailed a resource so vital to our economic and national security. In no other industry has such action resulted in an 800-percent increase in prices, perpetuated by the presence of a cartel.

Should product imports reduce the ability of domestic refiners to convert domestic and SPR crude oil to needed products in the event of a future emergency, it will matter not why the displacement of domestic refining capacity occurred.

COMPELLING QUESTIONS DEMAND ANSWERS

Will petroleum product imports continue to increase? Available information certainly suggests that product imports will continue to increase. Consider the following. While U.S. refining capacity has decreased by 14% since 1982, OPEC and other Persian Gulf nations have been increasing capacity by 50%. There are 17 grassroots refineries planned or under construction (or just completed) in the world today. Only one of these is in an industrialized, or consuming, nation. All of the countries that are adding new refining capacity also have growing domestic crude oil production or spare production capacity. Three of four such refineries in Saudi Arabia alone have been designated as export refineries. The strong U.S. dollar and existing or potential trade barriers in Europe and Japan serve as strong indicators that most exports by these refineries will be targeted for the U.S. market.

Will petroleum product imports displace sufficient domestic refining capacity to jeopardize the strategic effectiveness of the SPR in the next emergency? The National Council believes that available data, while not providing all of the answers, certainly raise serious cause for concern. The potential stakes are so high that this question deserves the **fullest investigation on an expedited basis** by this Subcommittee and other appropriate policy bodies in government.

We must not let time dull our senses. Although not currently in the headlines, the national energy security threat is real and omnipresent. Experts generally agree that a supply disruption is likely to occur at sometime in the future. The only points still at issue are "When" and "How severe." Current increases in petroleum demand in consuming nations are projected to continue, with a tight market expected to return within a few years. Political instabilities in major oil producing nations have by no means diminished and are expected to continue as the norm. It is only a matter of time before OPEC will again have effective control of the incremental barrel.

The product import trend reminds us again that the world we live in is a dynamic and complex system with one ominous constant--**change**. Petroleum product imports represent the **new factor** in the emergency preparedness equation, which possesses the potential capability of disarming the SPR, and turning this imposing strategic weapon into the next Maginot Line.

Will the U.S. again turn a blind eye to emerging problems, reacting to a crisis only after the fact, typically with too much of the wrong solution? It would be a senseless tragedy if this nation were to turn to the SPR in a future emergency and find it to be rendered ineffective. This scenario could easily be realized if strategic planning remains static in the midst of a rapidly changing environment.

In closing, the National Council's member cooperatives are **farmer-owned.** We have endured through two oil emergencies, with farm fuel shortages and sharply higher prices. **We are not anxious to see mistakes of the past repeated needlessly in the next foreign oil cut-off.**

The attached White Paper, entitled "Petroleum Product Imports: Implications for U.S. Agriculture," is offered to the Subcommittee for the record as a sort of "snapshot" of our analysis to date on this critical issue. Our investigation thus far has generated as many questions as answers. However, one consideration is increasingly coming into focus: If product imports continue to increase, displacing domestic refining capacity, a threshold will be crossed at some point which would place our nation under the threat of a new kind of vulnerability. At a minimum, that point would logically seem to lie above an equilibrium between operational domestic refining capacity as compared with domestic crude oil production, plus SPR drawdown capacity. Indeed, the threshold may well have been crossed.

The National Council stands ready to work with others in examining potential problems raised by product imports, and, if necessary, in exploring possible appropriate policy responses. We thank you for this opportunity to share our views, and would be pleased to respond to any questions that members of the Subcommittee may have.

National
Council of
Farmer
Cooperatives

PETROLEUM PRODUCT IMPORTS:
Implications for U.S. Agriculture

May 1985

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Washington, DC 20036
202/659-1525

Serving America's Family Farmers

Growing U.S. dependence on foreign petroleum products could add an ominous new dimension to the continuing threat of petroleum supply disruptions.

If this trend continues unabated, the next emergency is likely to involve a cut-off not only of crude oil but also of petroleum products. Remaining domestic refining capacity at that time may be inadequate to convert SPR crude oil into needed products.

The consequences for agriculture and the nation would be devastating.

PETROLEUM PRODUCT IMPORTS:
Implications for U.S. Agriculture

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1. TREND ANALSYSIS IN IMPORT DATA
2. COMPARATIVE REFINING CAPACITIES, U.S. vs. OPEC
3. POTENTIAL EFFECT OF NEW OPEC EXPORT REFINERIES ON THE REFINING INDUSTRY IN THE UNITED STATES
4. U.S. AGRICULTURE AND THE RURAL PETROLEUM SYSTEM

PETROLEUM PRODUCT IMPORTS
Implications for U.S. Agriculture

EXECUTIVE SUMMARY

Farmer cooperatives' heavy involvement in energy emergency preparedness policy debate over the past 12 years hinges upon the fact that U.S. **agriculture must have uninterrupted access to equitably-priced petroleum fuel supplies.** Yet **agriculture** is perhaps most **vulnerable** to energy supply disruptions.

It is this combination of need and vulnerability that led **farmers** to invest in **their own cooperative petroleum system** over the past 50 years. The cooperative system represents the only segment of the oil industry in which the consumers of its products are also its owners. This feature carries with it not only **a unique accountability** in terms of commitment of supply, service and price, but also **a unique institutional perspective and sensitivity to this nation's energy security.**

History has demonstrated that even a relatively minor petroleum disruption can generate long gasoline lines, crisis-driven price increases and devastating macroeconomic consequences. Farmers were forced to pay as much as $5 billion more annually for their petroleum fuels from 1979 through 1983 as a result of the Iranian disruption alone.

Imports of gasoline and middle distillates have increased more than three-fold within the last four years, and have approached 10 percent of domestic demand. Substantial evidence exists that this trend may continue. **A new kind of vulnerability** threatens to emerge, with potentially grave national security implications.

- Increasing petroleum product imports could displace sufficient domestic refining capacity to **jeopardize the Strategic Petroleum Reserve's (SPR) effectiveness.**
  - Remaining domestic refining capacity at some point would be insufficient to refine domestic production plus SPR drawdown in the event of another disruption.
  - Supply disruptions in the past cut off crude oil. The next disruption could curtail finished fuels.
  - Farmers and other U.S. **consumers require petroleum products,** not crude oil. **Refineries are necessary** to accomplish that conversion.

EXECUTIVE SUMMARY (continued)

- Rising product imports exacerbate the current depression in the domestic refining industry.
    - Cooperative refineries are disproportionately impacted, as they generally do not have offsetting crude oil earnings. Additionally, the agricultural economy is going through its own severe economic crisis. A total of **$675 million in cooperative refinery assets is potentially at risk.**
    - If cooperative refineries are forced to shut down, then their traditional role **as the principal supply source** for the cooperative distribution system would be **replaced by dependence on imported products and a volatile spot market. These sources dry up quickly during a disruption**, and a fuel shortage could quickly degenerate into a food crisis.
- Available information suggests that **product imports will indeed continue to increase:**
    - Arab OPEC nations have already added or are in the process of adding four new refineries with a combined capacity in excess of 1,000,000 barrels per day.
    - Most exports by these refineries will be targeted for the U.S. market.
    - Almost half of all refining capacity, outside of Communist countries and the U.S., is now **state-owned and controlled.** Products from these refineries are often **subsidized.**

The potential stakes are so high that **petroleum product import trends, and their implications for U.S. agriculture and for national energy security, deserve the fullest investigation on an expedited basis.**

May, 1985
NCFC

PETROLEUM PRODUCT IMPORTS:
Implications for U.S. Agriculture[1]

FUEL ACCESS CRITICAL TO U.S. AGRICULTURE

One fundamental premise underlies agriculture's unique ties to its energy inputs:

> **U.S. agriculture must have uninterrupted access to equitably priced supplies of petroleum fuels, in order to assure dependable supplies of food and natural fiber for the nation and the world.**

Agriculture lies at the **end** of petroleum supply lines. Past disruptions have been felt **first** and most acutely **in rural areas.**

Timing is critical. While the energy needs of agriculture are seasonal and variable, they are specific and essential. Agriculture, as opposed to industrial operations, cannot make up for lost production at a later date. A disruption of even a short duration can result in crop losses for an entire year.

It is **this combination of need and vulnerability that led farmers to invest in their own petroleum supply and distribution systems** over the last 50 years.

Today, supply cooperatives own and operate five efficient refineries possessing an aggregate production capacity of 337,700 barrels per stream day. Farmer cooperatives market petroleum products in more than 40 states and currently supply about 45% of all on-farm fuel and a large portion of rural needs.

The cooperative petroleum system represents the **only segment of the oil industry in which the consumers of its products are also its owners.** This feature carries with it not only a **unique accountability** in terms of commitment of supply, service and price, but also a **unique institutional perspective and sensitivity--borne of the painful experiences of two oil supply disruptions in the past decade--to this nation's energy security.**

---

[1] The National Council of Farmer Cooperatives is an association of cooperative businesses which are owned and controlled by farmers. Its membership is comprised of 107 major marketing and farm supply cooperatives, the 37 banks of the cooperative Farm Credit System and 32 state councils of farmer cooperatives. The National Council represents about 90% of the more than 6,100 farmer cooperatives in the nation, with a combined membership of nearly two million farmers. The National Council has been heavily involved in national policy debate concerning energy emergency preparedness for the past 12 years.

CONTINUED THREAT OF DISRUPTIONS

History has demonstrated that a relatively minor supply disruption can generate long gasoline lines, crisis-driven price increases and devastating macroeconomic consequences. For example, during the Iranian disruption in 1979, there was no actual decrease in the U.S. level of crude oil imports. Yet inventory adjustments reflecting perceived shortages led to supply disruptions and a 180-percent increase in crude oil prices.

It is estimated that the adverse economic effects of the 1979 disruption alone resulted in oil price increases that forced farmers to pay as much as $5 billion more annually for their petroleum fuels through 1983. Even though prices have declined recently, much of this legacy still remains.

The national security threat is real! Experts generally agree that a supply disruption is likely to occur at some time in the future. The more compelling questions have been "When?" and "How Severe?".

- Current increases in petroleum demand in consuming nations are projected to continue.
- A tight market is eventually expected to return, with demand and supply in close balance.
- Political instabilities in major producing countries are expected to continue as the norm.
- OPEC will again have effective control of the incremental barrel.

SPR RESPONSE

The U.S. has acted to avoid a repeat of damages wrought by two crude oil disruptions over the past decade by filling the Strategic Petroleum Reserve (SPR) with more that 460 million barrels of crude oil to date. The SPR is intended to be the first and major line of defense against the next disruption.

The U.S. Department of Energy (DOE) has stated that, at current levels of petroleum imports, the SPR now has sufficient crude oil inventories to offset a total cutoff of petroleum imports for more than 90 days. This statement may have been correct from a strict volumetric consideration, but doubts arise when one looks at recent import volumes and the anticipated SPR drawdown capacity.

- According to DOE, 1984 petroleum imports averaged 5.184 million barrels per day (MMBPD), excluding SPR imports. Of that total, 3.206 MMBPD were crude oil imports and 1.979 MMBPD were product imports.

- Although the SPR drawdown capacity is currently rated at approximately 2.3 MMBPD, it scheduled to go to 4.5 MMBPD.

Further, it must be recognized that U.S. consumers **require petroleum products**--gasoline, diesel fuel, heating oil--not crude oil. To risk overstating the obvious, **refineries are necessary to accomplish that conversion.**

Therefore, it would seem that the statement by DOE carries with it a vital, implicit assumption that sufficient domestic refining capacity is available to convert the SPR crude oil into needed products accessible to end use markets on a timely basis during an emergency.

PETROLEUM PRODUCT IMPORTS MAY THREATEN NATIONAL SECURITY

Two new questions are emerging which demand serious debate within the nation's policy community:

- **Are product import trends such that future disruptions will involve refined products?**

- **Will sufficient domestic refining capacity be available to utilize the nation's SPR in such an event?**

The ability of the nation to deal with future energy emergencies could be diminished significantly as a result of rising petroleum product imports. Should this lead to an **over-dependence** on imported products, grave national security implications may arise in the form of **a new kind of vulnerability** that could again result in gasoline lines and disruption-driven price shocks in the next emergency.

- Barring a change in petroleum product import trends, the next foreign supply disruption **could easily curtail** a significant portion of the nation's **finished fuels** used in agriculture, transportation, home heating, industry, and defense.

- Supply disruptions in the **past** cut off **crude oil,** with resultant gasoline lines and devastating macroeconomic consequences. Absent a sharp reduction in the rate of growth in petroleum product imports, supply disruptions of the **future** will also cut off **finished products.**

- The SPR can be used effectively in response to either type of disruption, **assuming that sufficient domestic refining capacity is available and positioned to serve all market segments.**

- To the extent that U.S. refining capacity is displaced by product imports, **remaining capacity will eventually be insufficient** to meet vital domestic energy needs in the event of another supply disruption.

    - It is extremely expensive to "mothball" refineries. Most surplus refining capacity will likely be scrapped.

    - Remaining idle capacity would be difficult or impossible to reactivate on a timely basis during an emergency. Time is required not only to reactivate refining equipment but also to train operating personnel and develop working inventories of crude oil and products.

    - It takes years, not months, to construct new refining capacity and bring it onstream. Environmental obstacles make it almost impossible to gain approval of a new "grassroots" refinery.

- The maintenance of a competitive and technologically advanced domestic refining industry is vital to insuring the availability of petroleum product supplies in an emergency, if the effectiveness of the SPR in responding to shortages is to be maintained.

PRODUCT IMPORTS DISPLACE U.S. REFINING CAPACITY

The U.S. refining sector, already buffeted by thin or negative margins, is now faced with a steadily growing volume of petroleum product imports (see "TREND ANALYSIS IN IMPORT DATA," Enclosure 1). This trend derives from a series of complex factors:

WORLD MARKET FACTORS

- **Surplus Conditions**--A world-wide refining capacity surplus, coupled with the current crude oil glut and the inability of the OPEC cartel to adjust production to reflect existing world market requirements, has flooded the market with petroleum products.

- **Strong Dollar Makes U.S. Most Lucrative Market**--The federal deficit, high interest rates, and U.S economic strength have created such a strong, over-valued dollar that U.S refiners, as well as other exporters, are excluded from world markets. Conversely, a strong U.S. dollar has helped to make the U.S. market increasingly attractive to imports, including fertilizer, automobiles, steel, textiles, leather goods--and most recently, petroleum products.

- **Gasoline is a By-product Overseas**--Many overseas refineries are designed to yield heavier fuel oil products for local markets and therefore need to export surplus gasoline to the U.S. at whatever price will assure a market.

- **Import Barriers in Other Consuming Nations**--Some other consuming nations (most notably Japan) have moved to erect barriers against petroleum product imports, largely for national security reasons. Surplus petroleum products thus tend to be focused on the U.S. market where trade barriers are essentially non-existent.

OPEC FACTORS

- **Quota Subversion Device**--Since OPEC countries are constrained by official crude oil quotas and prices, they also use product exports as a means of subverting the production quota system to increase exports and generate much needed dollars.

- **Dual Crude Pricing**--Products from new export refineries in producing countries are being sold in the global spot market at prices that net back crude values well below cartel-set, official sale prices in those same countries. In other words, these government-owned refineries are internally subsidized in order to discount cartel-set prices and penetrate markets.

- **Major Increase in Arab OPEC Refining Capacity**--Arab OPEC nations have already added or are in the process of adding four new refineries with a combined capacity in excess of 1,000,000 barrels per day. These Arab States are thus increasing capacity by about 50% at the same time that U.S. domestic refining capacity has undergone a major contraction. (See Enclosures 2 and 3 for further discussion of "COMPARATIVE REFINING CAPACITIES" and "POTENTIAL EFFECT OF NEW OPEC EXPORT REFINERIES ON THE REFINING INDUSTRY IN THE UNITED STATES")

U.S. REFINING FACTORS

- **Costs of Regulation**--U.S. refiners cannot match the low raw material, energy, and regulatory compliance costs of their foreign competitors; nor do they receive government subsidies which accrue to many large overseas refiners. Furthermore, flagrant abuses in the present U.S. tariff system involving petroleum products have resulted in an influx of imported products which violate the very EPA standards that are enforced so rigorously upon domestic refineries.

- **U.S. Refining Efficiency**--U.S. refiners are NOT competitively disadvantaged because of technological obsolescence, inefficiency or low productivity. In fact, the U.S. industry is the world leader in these areas and has invested billions of dollars to maintain its lead.

COOPERATIVE REFINING FACTORS

- **Cooperative Refineries Efficient**--Farmer-owned cooperative refineries have yields of gasoline, diesel fuel and heating oil amounting to approximately 85 to 90% of their refined products.

- **Cooperative Refineries are Quite Efficient Relative to Major Refineries:**

    - At optimum utilization rates, average cooperative refinery cash operating costs were $0.87 per barrel lower than the average for major refineries in 1983.

    - In 1983, the average cooperative refinery was 25% more fuel efficient than the average major refinery.

- **Disproportionate Impact on Cooperative Refiners**--Major oil companies are able to offset refining losses for considerable periods through their earnings from crude oil production and other investments. Cooperatives and other independent refiners are by definition crude deficient and generally do not have crude production earnings with which to weather such refining losses. The cooperative system certainly has no reserves from other sources, as the agricultural economy is going through its own economic crisis.

ECONOMIC HARDSHIP FOR THE AGRICULTURAL COMMUNITY

Increasing product imports may contribute to downward pressure on fuel prices in the short term. Any fuel cost savings, when examined in isolation, certainly represent welcome news to hard-pressed farmers. However, closer assessment within a larger context identifies potential **short-run and long-run costs** to agriculture of much greater magnitude:

A PROBLEM, NOT A SOLUTION

- A continuing decline in the U.S. refining industry would tend to reduce competition and would lead ultimately to increased import prices. **The displacement of U.S. refining capacity by imports is not a solution; rather it is a serious problem.**

- The U.S. seeks a market-oriented system, which, by its very nature, must rest on competition. **Foreign export refiners seek to eliminate competition.**

- The margin squeeze on the domestic refining industry also translates into operating losses for farmer-owned cooperative refiners. **Regional cooperatives which have been hard hit in other areas can ill afford concurrent losses in their refining operations.**

- If product imports in fact exacerbate already depressed conditions, it could mean a **shutdown** of one or more cooperative refineries. Economically weakened cooperatives may be unable to survive the write-off of these investments. A total of **$675 million in cooperative refinery assets (hardware only) is potentially at risk.**

RURAL DISTRIBUTION IN JEOPARDY

- Farmers could face **excessively high fuel prices**, and indeed, a possible **loss of fuel during critical operations.**

- In agriculture, a **fuel disruption of even short duration at the wrong time can result in crop losses or sharply reduced yields for that entire year.** Even a modest petroleum disruption under the conditions just described could quickly turn into a food crisis of far greater magnitude. [For a further discussion of the adverse impact on agriculture of a fuel supply disruption, see Enclosure 4, "U.S. AGRICULTURE AND THE RURAL PETROLEUM SYSTEM."]

- Over the longer term, the **traditional role of cooperative and other U.S. independent refiners** as the **main supply source** for cooperative and independent marketers in **rural areas** could be **increasingly replaced by imported products** and a volatile spot market. These sources dry up during a shortage. Major oil companies are not well positioned to fill the void, as they have continued to withdraw from rural America.

- The SPR **could not be used to displace lost supplies,** particularly **in rural areas, if sufficient domestic refining capacity is not available,** or properly located, to process the crude into needed products and move those products to market on a timely basis.

- Thus, should increased product imports displace domestic refining capacity, farm operators and **rural communities would be far more likely to endure serious shortages during the next petroleum emergency.**

COMPELLING QUESTIONS REQUIRE ANSWERS

Will petroleum product imports displace sufficient domestic refining capacity to jeopardize the strategic effectiveness of the SPR? That is the most compelling question raised by this White Paper.

- The brief analysis of import trend data and underlying factors reminds us again that the world we live in is a dynamic and complex system with one ominous constant--**change.**

- Petroleum product imports represent the new factors in the emergency preparedness equation, which possess the **potential** capability of disarming the SPR, and turning this imposing strategic weapon into the next Maginot Line.

- The National Council believes that **available data raise serious cause for concern.** The potential stakes are so high that this question deserves the **fullest investigation on an expedited basis at the highest policy levels of government.**

Will the U.S. again turn a blind eye to emerging problems, reacting to a crisis only after the fact, typically with too much of the wrong solution?

- It would be a **senseless tragedy** if this nation were to turn to the SPR in a future emergency and **find the SPR to be ineffective.** This scenario could easily occur if strategic planning remains static in the midst of a rapidly changing environment.

What would be the impact on agriculture?

- If the trend toward U.S. dependence on imported products continues unabated, the next emergency is likely to involve a cut-off not only of crude oil but also of petroleum products. **The consequences for agriculture and the nation would be devastating.**
- **U.S. agriculture must have uninterrupted access to equitably priced supplies of petroleum fuels, in order to assure dependable supplies of food and natural fiber for the nation and the world.**
- **Agriculture** lies at the end of petroleum supply lines and would be **the first to suffer in the event of a disruption.**

The National Council's member cooperatives are farmer-owned. We have lived through two oil emergencies, with farm fuel shortages and sharply higher prices. We are not anxious to see **mistakes of the past repeated needlessly** in the next foreign oil cut-off. We stand ready to work with others in examining potential problems raised by product imports and, if necessary, in exploring possible appropriate policy responses.

May 1985
NCFC

ENCLOSURE 1

TREND ANALYSIS IN IMPORT DATA

A detailed analysis of DOE import data over the last four years demonstrates an accelerated growth in imports of both finished and unfinished petroleum products.[1]

- **Growth in Gasoline Imports**--As illustrated in Tables 1 and 2 below, total imports of finished gasoline, blending stocks and unfinished oils increased by a factor of 231% from 1981 to 1984. These same total "gasoline" imports represent an increase from 4.5% of U.S. gasoline supplied in 1981 (6,588 MBPD) to 10.3% in 1984 (6,698 MBPD).

Table 1[2]

Imports of Gasoline and Gasoline Components
1981-1984
in
Thousand Barrels per Day

Year	Finished Gasoline	Blending Stocks	Unfinished Oils	Total
1981	150	22	126	298
1982	186	39	203	428
1983	249	35	268	552
1984	291	79	319	689

Table 2

1984 Imports of Gasoline and Gasoline Components
as a Percentage of
1981 Imports of Gasoline and Gasoline Components
(Based on Table 1 above)

	Finished Gasoline	Blending Stocks	Unfinished Oils	Total
1984/ 1981	194%	359%	253%	231%

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[1] The trends may be understated, as DOE-reported imports are as much as 25 percent less than volumes reported by the U.S. Customs Service.

[2] Petroleum Supply Annual, & Petroleum Supply Monthly, (1981-4), Energy Information Administration, Department of Energy. Unfinished oils include naphtha, special naphtha, and other oils.

- **Middle Distillates**--Table 3 illustrates that imports of middle distillates (e.g., diesel fuel, home heating oil) are rising at a dramatic rate. Although absolute levels are not yet significant, the trend bears watching.

Table 3[3]

Imports of Middle Distillates
in
Thousand Barrels Per Day

Year	**Total**
1981	173
1982	93
1983	174
1984	270

- **Tariff Differentials and Abuses**--Anomalies in the current tariff schedule have apparently facilitated much of the surge in product imports.
  - Much of the naphtha and sub-specification gasoline being imported is entered directly, or indirectly, into the gasoline market to compete head-to-head with domestically refined product and imported gasoline which has incurred the full finished product tariff.
  - Yet, these "unfinished" products enter the country incurring less than 20% of the tariff assessed on finished product as demonstrated in Table 4.
  - While the International Trade Commission (ITC) and other jurisdictional policy bodies are currently investigating these developments, there is no assurance at present that effective corrective actions will be forthcoming.

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[3] Ibid at Footnote 2

Table 4

Import Duties on Selected Petroleum and Petroleum Products

Product	Tariff in Cents per Barrel
Crude Oil and Distillate & Residual Fuels:	
under 25° A.P.I.	5.25
25° A.P.I. or more	10.50
Motor Fuels: Finished Gasoline, Diesel & Jet Fuel	52.50
Naphtha & Unfinished Oils	10.50
Ethanol	2,520.00

- **CBI Ethanol Loophole**--Importers are utilizing a loophole presented by the Caribbean Basin Initiative (CBI) to avoid the present tariff on anhydrous fuel ethanol.
  - Alcohol from Brazil and Spain is being shipped to Caribbean sites for "manufacture" or "processing" --actually a drying process--in order to qualify for special tariff exemption treatment under the Caribbean Basin Initiative Program.
  - Since this additional processing occurs in the Caribbean, the normal ethanol tariff of $0.60 per gallon ($25.20 per barrel) is avoided, thereby frustrating the original intent of the tariff which was designed to offset the tax credit of $0.60 per gallon received upon sale.
  - This serves to drive down the value of domestic gasoline and alcohol fuels, further exacerbating depressed industry conditions.
- **Import Violations**--The available data mask even more serious abusive practices.
  - Evidence strongly suggests that cargoes are being miscertified to qualify for lower tariff classification (e.g., gasoline registered as naphtha).

- Evidence also suggests that importers are miscertifying lead levels of incoming "gasoline" cargoes. Such miscertification enables importers to abuse the lead rights trading program and to violate U.S. laws by selling leaded gasoline exceeding EPA lead limits or by representing leaded gasoline as unleaded product.

- Gasohol imports, which bear gasoline duties of 1.25 cents per gallon are also reportedly being miscertified. In some instances, importers have understated ethanol content to avoid the much higher ethanol tariff. One cargo was found to contain thrity percent ethanol, or 3 times the EPA limit of 10%.

ENCLOSURE 2

COMPARATIVE REFINING CAPACITIES, U.S. vs. OPEC

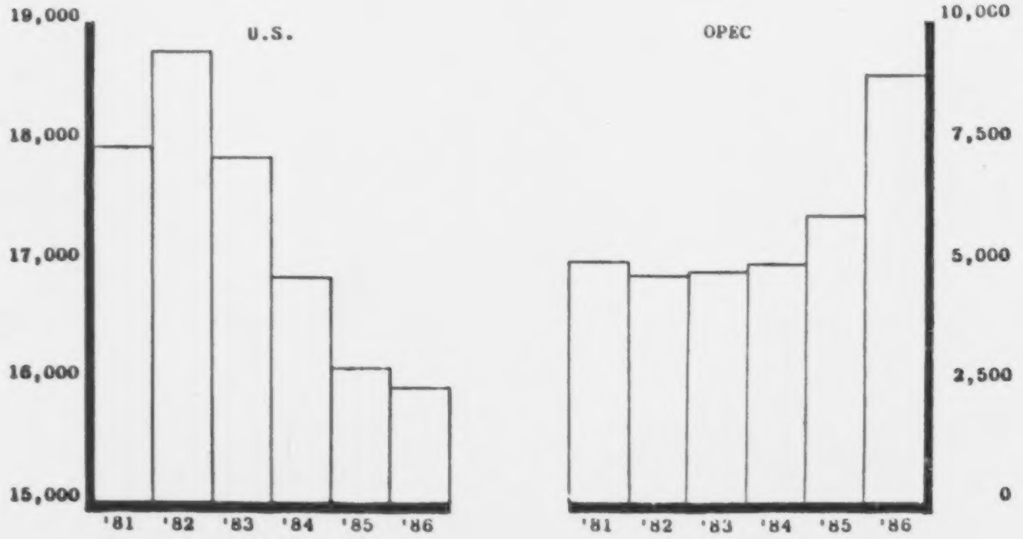
The U.S. refining industry is undergoing a major contraction. From 1981 through 1983, 2 million barrels per day (BPD) of capacity were shut down permanently, with an additional 1 million BPD idled. Capacity in excess of 1 million BPD was shut down during 1984. An additional 1 million BPD could close down in the near future. Yet, in spite of a contraction in existing capacity in the U.S. and other consuming regions, offshore refining capacity is expanding in oil producing regions.

- While U.S. refining capacity has decreased by 14% since 1982, OPEC countries have been increasing capacity by 50% over the same period. See "COMPARATIVE REFINING CAPACITIES, United States vs. OPEC." on the following page.
- Almost half of the world's refineries, outside of the U. S. and Communist countries, are now government-owned and controlled. Products from these refineries are typically subsidized internally as necessary to discount cartel-set prices or to penetrate markets.
- There are 17 grass roots refineries planned and under construction--or just completed--in the world today; only one of these is in an industrialized nation (Canada). Saudi Arabia has 4 of the 17 plants, and 3 of those are designated as export refineries and are designed to produce petroleum products for the U.S. market.
- All of the countries that are adding new refining capacity also have growing domestic crude oil production or spare production capacity.
- A combination of factors mentioned earlier, most notably the strong U.S. dollar and existing or potential trade barriers in Europe and Japan, strongly suggests that most exports by these refineries will be targeted for the U.S. market.

ENCLOSURE 2

COMPARATIVE REFINING CAPACITIES

United States[1] vs. OPEC[2] [3]
(Thousands of barrels per calendar day)



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[1] Source, U.S. capacities: Refinery Trends in Capacity and Utilization, Department of Energy, 1984.

[2] Source, OPEC capacities: 1981-1985, Oil & Gas Journal, Annual Worldwide Reports; 1986, Washington Bulletin, National Petroleum Refiners Association, October 12, 1984.

[3] In this case, OPEC includes the 13 OPEC members plus two non-OPEC members: Bahrain and Oman. The drop in capacity from 1981 to 1982 reflects the reduction in operable Iranian capacity.

ENCLOSURE 3

POTENTIAL EFFECT OF NEW OPEC EXPORT REFINERIES ON THE REFINING INDUSTRY IN THE UNITED STATES

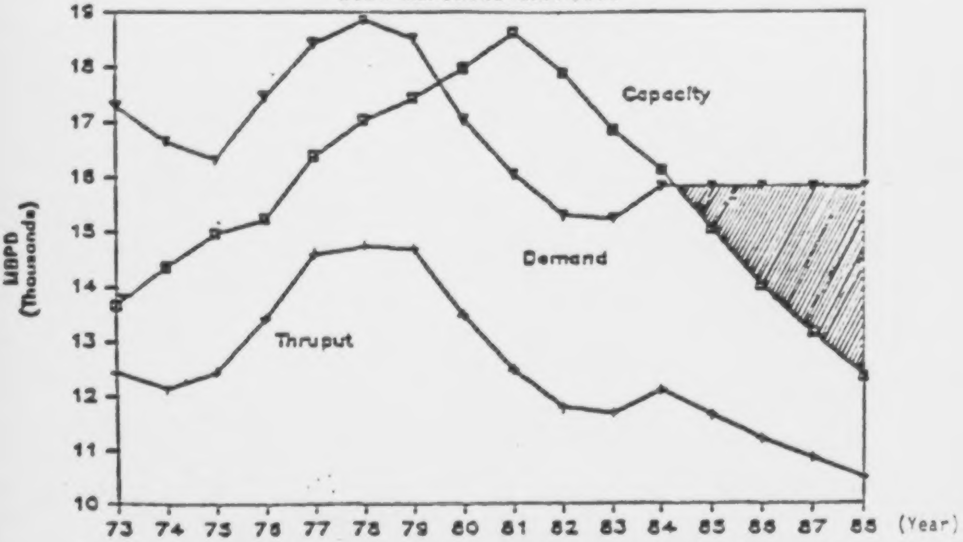
New, government-controlled export refineries coming on stream in the next few years in various OPEC countries will displace other refining capacity throughout the world. Some production from the first refineries to start up has already entered the United States, even though other market destinations would be more logical when assessed from a transportation cost perspective alone.

Significant national security considerations arise when examining the graph below, which demonstrates the potential impact on U.S. refining of new OPEC refineries. The shaded area represents the shortfall of domestic refining capacity as compared with domestic demand for refined products.

By 1988, even if remaining domestic capacity were operated at the maximum sustainable rate, it would be able to accommodate only U.S. crude oil production, plus 2.5 million barrels per day (bpd) of Strategic Petroleum Reserve (SPR) drawdown. The ultimate deliverability of the SPR will be 4 million bpd. U.S. refining capacity would be able to supply only 13.1 million bpd of the 15.8 million bpd demand forecast in this scenario. During a serious petroleum supply shortfall, reduction in demand or some other source of supply would have to make up the remaining 2.5 million bpd shortfall.

Crude oil shortages of considerably smaller magnitude than this hypothetical product shortfall have exacted heavy economic penalties in the last two disruptions.

IMPACT OF OPEC IMPORTS ON
U.S. REFINING CAPACITY



Source: Graph prepared by Texas City Refining using data from Throughput Capacity through 1984: DOE; OPEC Refining Capacities: Hydrocarbon Processing Construction Boxscore.

ENCLOSURE 4

U.S. AGRICULTURE
AND
THE RURAL PETROLEUM SYSTEM[1]

FOSSIL FUELS KEY TO AGRICULTURE'S SUCCESS:

Agriculture is the backbone of the U.S. economy. Not only does the agricultural community provide the food and fiber essential to the health and economic prosperity of the United States; but, in a very real sense, it feeds much of the rest of the world as well.

Perhaps no element of our economy fulfills such a crucial, global responsibility. If agriculture in this country were, for some reason, unable to meet that responsibility efficiently, the effects would be felt all too swiftly on a worldwide scale. About 2.5 million farm families produce enough food and natural fiber to feed and clothe 235 million Americans. These same farm families also export enough agricultural products to offset more than half of our annual bill for oil imports.

The high **level of U.S. agricultural productivity,** taken for granted by many, **depends heavily on critical petroleum fuel inputs** to facilitate the conversion of energy from the sun into food and natural fiber. By adopting technologies based heavily on fossil fuels, farmers have doubled output levels since 1940, without using more cropland. Labor productivity has increased more than ten-fold during that time, with one farmer now producing enough to feed himself and 79 others.

Given the vagaries of nature and the perishable characteristics of agricultural products, timing is critical to operations. Farmers and other components of the food and natural fiber system must have fuel in sufficient quantities and at the appropriate time and place to ensure full food and natural fiber production.

DISRUPTION IMPACTS ON AGRICULTURE -- AVAILABILITY AND PRICE:

A petroleum disruption can quickly generate serious adverse impacts on U.S. agriculture in two ways--availability and price.

Shortages of fuel are of the most immediate and overriding concern, as even a **disruption of short duration at the wrong time** can result in **crop losses** or sharply reduced yields for that **entire year.**

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[1] This white paper was prepared under the auspices of the National Council of Farmer Cooperatives, to offer a brief perspective on how energy supply disruptions impact upon the delicate relationships between agriculture and its rural petroleum distribution network. Revised May 1985.

One USDA analysis estimated that **a 10-percent shortage at the farm could lead to a 55-percent increase in farm commodity prices.**[2] Fuel shortages similarly affect processing and distribution operations, and can cause spoilage losses and prevent food from ultimately reaching the consumer.

Sharp rises in energy costs resulting from a disruption are also cause for concern. For example, **each 10-percent increase in energy costs across the food system can raise food prices 1.2 percent, if fully passed through.**[3]

In the short-term, however, the farmer as a "price taker" in a truly competitive marketplace must absorb such cost increases (Beyond the farm gate, costs can be more readily passed on).

Unfortunately, disruption-driven price increases generally tend to become a permanent fixture. American agriculture and the economy are still paying a heavy price generated by the 1979 disruption.

To place the economic effects of the last disruption in perspective, it is estimated that the resultant oil price increase meant that farmers spent as much as $5 billion more annually for their petroleum fuels through 1983. Contrast this increased input cost alone with depressed net farm income levels in the range of $16-31 billion annually during that period. As natural gas moves toward decontrol, this critical fuel and feedstock will also increasingly reflect jumps in oil prices.

Agriculture can ill afford any disruption-driven additions to this continuing legacy, especially in light of the grim prognosis for farm income over the next several years.

The American consumer ultimately bears disruption-related costs as they impact upon agriculture--be the problem availability or price--in the form of higher food prices. This is no small matter, as **food is a basic and essential commodity which accounts for about 17 percent of total consumer expenditures, with the share rising to 40 percent for low income groups.**

ROLE OF THE FARMER COOPERATIVE PETROLEUM SYSTEM:

Among the farmer cooperatives the National Council represents are supply cooperatives which own and operate five efficient refineries possessing an aggregate production capacity of 337,700 barrels per stream day, and whose yields of gasoline, diesel fuel and heating oil amount to approximately 85 - 90 percent of their refined products.

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[2] "Constrained Input-Output Simulations of Energy Restrictions in the Food and Fiber System," J. B. Penn and George D. Irwin, USDA AER Report No. 280, February 1977.

[3] For a food system analysis, see "Energy Policies: Price Impacts on the U.S. Food System," USDA/ESCS, 1979.

While this represents only about two percent of United States refining capacity, cooperatives market petroleum products in more than 40 states and currently supply about 40 percent of all on-farm fuel and a large portion of rural needs.

About three-fourths of the petroleum products sold by farmer cooperatives go to farmers, with the remaining volumes sold to other rural customers. This distribution network for petroleum products is unique and irreplaceable.[4]

Farmer cooperative responsibilities have steadily increased, in large part due to partial and total market withdrawals in rural areas by major oil companies. The economic forces causing the withdrawal of these companies from rural markets are understandable. However, the responsibility of serving not only farmers but rural communities which support farming fall more heavily on cooperatives and other independent refiners. In 1979, more than 900 communities were supplied solely by farmer cooperatives, with the total growing each year.

Farmer cooperative petroleum operations represent the only segment of the oil industry in which the consumers of its products are also its owners. This feature carries with it a **unique** accountability in terms of commitment of supply, service and price.

AGRICULTURAL VULNERABILITY TO PETROLEUM DISRUPTIONS:

The rural petroleum system's ability to meet agricultural needs is heavily dependent upon the ability of farmer-owned and other independent refiners serving rural markets to obtain **adequate supplies of crude oil at competitive prices.**

The past decade has provided ample evidence that energy supply life lines to farm and rural communities are particularly sensitive to disruptions. In particular, the Arab Oil Embargo in 1973 and the Iranian shutoff in the spring of 1979 both placed great stress on fuel supply lines to rural areas, with many farmers experiencing difficulty in getting sufficient fuel for critical operations.

These crude oil disruptions generally impact first and hardest upon farmer cooperative and other independent refiners, whether generated by absolute shortfalls in supply or such high prices that the crude oil is unavailable as a practical matter. For example, as a consequence of the Iranian disruption in early 1979, cooperative refiners lost a significant portion of their crude oil supplies and were forced to run at 50 percent of capacity (compared to an industry average of 85 percent). Further, crude oil acquired by farmer cooperatives was priced well above the national average.

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[4] A thorough description of this system is contained in Petroleum Cooperatives, 1982, by E. Eldon Eversull and John R. Dunn, USDA, ACS Research Report No. 46, May 1985.

The resulting market impacts were predictable. Other refiners were not positioned to serve the rural distribution system. Even those who could have were committed to their own markets and busily rebuilding their inventories in anticipation of increasing shortages. As a result, rural areas experienced serious diesel fuel shortages during the spring planting season and winter wheat harvest, and farmers bore a disproportionate share of OPEC-driven price increases.

When fuel shortages first emerged in the spring of 1979, DOE officials initially responded to requests for assistance with a cavalier "agriculture will just have to muddle through." Only when the problem magnified to a potential agricultural disaster did a belated action emerge in the form of Special Rule No. 9, providing an agricultural priority for diesel fuel allocation. While this measure helped somewhat, there were simply **insufficient supplies in the rural distribution network to make up for the losses occasioned by regional crude oil shortages.**

Emergency crude oil allocations did ultimately move crude oil supplies to cooperative refineries. Unfortunately, this action did not occur for several months--well after spring planting. Had regional shortages been brought into balance early on at the crude oil end, reimposition of product allocation likely would have been avoided--and the panic-induced price spiral minimized.

Agriculture indeed was fortunate to "muddle through" somehow during past crises. **Effective and timely distribution of crude oil from the Strategic Petroleum Reserve (SPR) to domestic refiners serving rural markets represent the key to avoiding a painful duplication of past mistakes when confronting future shortages.**

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Senator NICKLES. Thank you very much.
Mr. GRIFFITH.

STATEMENT OF JACK A. GRIFFITH, PRESIDENT, GRIFFITH PETROLEUM, INC., ON BEHALF OF THE PETROLEUM MARKETERS ASSOCIATION OF AMERICA

Mr. GRIFFITH. Thank you, Senator. I know you have other appointments, and I know that the time is late, so I will not go through the normal dissertation I was going to give.

I represent the Petroleum Marketers Association of America. We are a federation of 41 State and local associations representing 12,000 independent private businessmen. Our associates sell about 50 percent of the gasoline sold in this country and 80 percent of the home heating oil, with most of the agricultural and domestic industry supplied by our members.

The asset base of our members would be 17th in the Fortune 500, so we represent a large segment, the largest segment of the marketing industry. We have a lot of concerns over imposing a fee or a tariff, many of those that you've already heard today, and it would be redundant for me to repeat them.

We feel that the imported product does give a source of price competition that's needed in the industry at this time. The thing that I would like to stress in trying to be brief is the thing that probably worries the small businessman more than anything else. If there is an addition of a tariff or something like that, it will bring on nothing but another bureaucracy. We just got through 7 or 8 years of the most horrendous time of our life trying to keep up with the bureaucrats of Washington, DC, and the everchanging rules and regulations that they didn't even understand.

We're a group of small businessmen and small entrepreneurs. We don't have a stable of legal attorneys and accountants on our staff. In fact, I have made the statement if I ever have another control come in this country, I'm going to take my son out of my business and send him to law school, because it's impossible for him to make money in our business and he can become rich as an attorney, I think.

Regulations, we feel, take away the ability of the small private entrepreneuer to act and react as marketing conditions change, and they change in our business almost daily. It takes away our ability to survive in the marketplace as we see it, and therefore we are opposed to anything at this point that would bring about further regulation, further bureaucracy and things of that nature.

We have seen it, and I am sure you have, Senator, where your body makes a good, level judgment decision that a regulation is needed, and then you turn it to the bureaucrat and it doesn't even come back as you designed and as you had hoped that it would be implemented. So our basic fear is that we would get some kind of regulation that we could not live with, much as we had in the 1970's.

PMAA would strongly recommend that future developments be carefully monitored. If this does become a national security issue or something like, we certainly would not want to be one of those that stands in the way of the most prudent action by the Congress of the United States in protecting this country.

Thank you very much.

[The prepared statement of Mr. Griffith follows:]

STATEMENT OF JACK A. GRIFFITH, PRESIDENT, GRIFFITH PETROLEUM, INC., ON BEHALF OF THE PETROLEUM MARKETERS ASSOCIATION OF AMERICA

Good morning, Mr. Chairman and members of the subcommittee. My name is Jack A. Griffith, and I am President of Griffith Petroleum Inc. of Stillwater, Oklahoma. I am appearing today on behalf of the Petroleum Marketers Association of America, of which I am the Immediate Past President. I very much appreciate the opportunity to address an issue of critical importance to the entire petroleum industry and indeed the entire country.

Mr. Chairman, I commend you for holding this hearing today on the impact of petroleum product imports on the domestic petroleum industry.

The Petroleum Marketers Association of America (PMAA), formerly the National Oil Jobbers Council (NOJC), is a federation of 41 state and regional associations representing some 12,000 independent marketers of a wide range of petroleum products including gasoline, home heating oil, and diesel fuel (see Attachment I). Collectively, the marketers represented by PMAA sell approximately 50 percent of the gasoline and 80 percent of the home heating oil consumed in America. If all the assets of the individual marketers represented by PMAA were combined, we would rank 17th on Fortune 500's list of companies ranked by assets.

PMAA has traditionally opposed any restrictions on imports of either refined petroleum products or crude oil. Our opposition to fees or tariffs on petroleum products has been based on several factors. First, refined product imports have always provided an important source of price competition for domestic refiners, thus keeping the price of products lower for the American consumer. Secondly, imports provided another source of supply for independent marketers, thus increasing the competition among domestic suppliers for the marketers' business. Third, independent marketers have always opposed government intrusions into the marketplace. An import fee or quota would almost automatically necessitate a new regulatory program to administer. Hardship exceptions from the rules would likely be sought by either certain countries which are allies of the U.S. or by certain domestic groups which may be particularly hard hit by a fee or quota. Such exception relief would create competitive imbalances in the market favoring some marketers over others.

The U.S. petroleum industry escaped from the nightmare of government controls in 1981. An import fee or quota may be the first step toward returning us to those types of controls again. Such a step would be useful only to the battery of lawyers and accountants who would have a field day at the ultimate expense of the American consumer.

The fourth reason PMAA has opposed import fees or quotas is that such fees or quotas would have a negative impact on the nation's economy. An analysis performed by the Petroleum Industry Research Foundation in 1982 projected that an import fee of $5.00 per barrel would cost consumers $29 billion in the first year and raise inflation by 1.3 percent. A Congressional Budget Office Study in the same year said that a $5.00 per barrel tariff would increase the consumer price index by between 0.8 and 1.0 percent; the unemployment rate by 0.1 to 0.2 percent and reduce constant dollar GNP by between 0.5 and 0.7 percent. This would mean a loss of 100,000 to 200,000 jobs.

Thus a fee or tariff would fuel inflation , increase unemployment and generally reverse the economic recovery now being experienced. It also would undermine other domestic industries' abilities to compete with their foreign counterparts.

In recent months there has been considerable debate concerning the increased levels of gasoline and middle distillate imports and the impact these imports are having on the domestic refining industry and their potential impact on national security. There are, however, several logical arguments that explain this increased level of imports. First, the American economy recovered earlier from the worldwide recession of 1981-82, the worst such recession since World War II. Second, the U.S. economy has recovered from that recession and has continued to grow faster than the economies of other countries. Third, an overly strong U.S. dollar has made it cheaper for Americans to import more foreign goods. And fourth, the English coal strike in 1984 created the need for large quantities of residual fuel oil. In the manufacturing of residual fuel oil, gasoline is a by-product. Since the demand for this gasoline was not expanding in Europe, it naturally found its way to our shores -- and to market. The coal strike has since been settled, and as the world economy catches up with our own, many of these other problems may be alleviated.

But in examining the issue of refined product imports, several questions must be answered: What is the current level of refined product imports and how does that compare with historic data? Where is the product coming from and who is bringing it into the country? To what extent are product imports responsible for the significant decline in the domestic refining industry in recent years? To what extent, if any, do product imports endanger our national security?

PRODUCT IMPORT LEVELS

According to data provided by the Department of Energy's Energy Information Administration, the total level of product imports in 1984 was up by approximately 19 percentage points over 1983 levels. The 1984 overall level of product imports, however, was considerably lower than the peak year of 1973, when over twice as many barrels of refined petroleum products were imported into the U.S. as were imported in 1984. In fact, overall product imports were less in 1984 than in any year since 1970, with the exception of 1983.

The concern expressed by some, however, is not with the overall level of product imports, but rather with the shift in the levels of imports of specific petroleum products. Throughout the 1970's and early 1980's, the bulk of refined product imports were residual fuel oil. While the level of resid imports into the U.S. has steadily decreased, it still accounted for over 51 percent of the total product imports into the U.S. in 1984.

Imports of gasoline (including blending components) and middle distillate increased substantially in 1984. Gasoline imports were at the highest level ever, up over 21 percent as compared with 1983. Middle distillate imports were at their highest level since the mid 1970's and were up by 35.6 percentage points over 1983 levels.

While these are certainly significant increases, one should not leap to major policy conclusions until several other factors are considered. First, the bulk of these imports are coming, not from the politically unsettled Middle East, but from nations which are considered strong allies by the U.S. including

Brazil, Canada, Italy, the Netherlands, the Netherlands Antilles, Trinidad and Venezuela. In many instances these imports are coming from American owned refineries in other countries. According to a study developed by Honolulu, Hawaii based East-West Center, only 2 percent of product imports or less than 0.2 percent of U.S. consumption is supplied from the Persian Gulf.

It is also interesting to examine who are the largest importers of refined petroleum products into the U.S. Among the top 10 importers are eight companies with strong domestic refining interests including Amerada Hess, Northville Industries, Apex, Phillips, Texaco, Pacific Resources, Sun and Koch. Ironically, some of these companies are the same ones which are urging consideration of some type of import restrictions.

Finally, one should examine the percentage share of the U.S. market which these imports comprise. According to Department of Energy data, even when imports of motor gasoline are combined with blending components to be used solely for the production of motor gasoline, import penetration in the U.S. gasoline market was less than 6 percent. This means U.S. refiners thus commanded over 94 percent of the domestic motor gasoline market.

DOMESTIC REFINING INDUSTRY

Estimates of the number of refinery closings since 1981 vary depending upon the source, ranging from 103 to 112. On January 1 of each year, the Energy Information Administration (EIA) reports the number of operable refineries for that year. For example, the number of operable refineries on January 1, 1984, was 247. Eighteen refineries closed in 1984. Therefore, there were 229 operable refineries on January 1, 1985.

EIA data shows that 103 refineries have closed since 1981. However, some of these refineries had actually stopped operations long before 1981. The timing of the official closing of the refinery has a great deal to do with financial reporting and for tax purposes. The cessation of operation is based upon pure economic decisions about the profitability of producing petroleum products.

Of the 103 refineries closed since 1981, 97 were actually operating after 1981. For instance, Amerada Hess closed a refinery in Port Reading, New Jersey, in December, 1983. However, that refinery ceased operating in December, 1974. The economic conditions which forced that refinery to close occurred during the early 1970's. It would be incorrect to attribute its demise to forces occurring in the late 1970's or early 1980's.

Historically, the number of domestic refineries began to grow in 1973. This reversed a trend of decline in the number of refineries which began in 1949. Interestingly, however, major integrated companies and large independent refineries continued to sell off their smaller units and consolidate their refining into larger, more efficient units. Small and medium-sized refiners, meanwhile, in contradiction to industry trends, were buying and opening refineries.

The reason for this wave of optimism by the small and medium refiners can be traced directly to the crude oil entitlements program and the small refinery subsidies which sheltered the inefficient and helped start many new, small refineries. New refineries sprang up with government guaranteed markets and cash subsidies from other refiners. Some inefficient refineries, which would have closed, remained open. One estimate of the value of the small refiner bias placed subsidies at up to $22.9 million per refiner, for those with capacity of 10,000 barrels per day or less. The largest subsidies went to refiners in the 30,000 b/d class, $31.2 million in 1980. For a 10,000 b/d unit, the investment was $25 million, or approximately $36 million in 1978 prices and $42 million in 1980 prices.

The subsidy, continuing year in and year out, was 19 percent of the initial investment in 1978, and 55 percent in 1980. The Oil and Gas Journal reported on March 26, 1979, that "...numerous tiny refineries have proliferated as a result of the small refinery entitlements bias. Since January 1, 1974, according to Department of Energy statistics, over 40 of these grassroots refineries have been built and added about 430,000 b/d of crude capacity. They added practically no gasoline making or high sulfur crude oil capability to industry totals."

There were additional programs to subsidize the small refiner, such as small business loans, exemption from pollution control standards and set aside programs. According to a DOE study, Small Refiner Bias: Final Report, refineries with capacity under 30,000 barrels per day were too small to take advantage of economies of scale. This report concluded that there were "substantial economies of scale in the construction and operation of sophisticated refining equipment." In spite of the economic disadvantages of small refineries, the subsidy "was sufficient to support profitable operation at that level." More than 60 of the refineries to come on stream during this period had capacities of less than 30,000 b/d. The 1981 API report, The Mandatory Petroleum Price and Allocation Regulations: A History and Analysis, summed this up well. "In most cases, small refineries tend to operate on low-sulfur crude oil and to produce large quantities of products such as asphalt, residual oil and kerosene, and relatively little of those products, such as lead free gasoline, required by consumers. Accordingly, most new refinery capacity brought on stream after the adoption of the small refiner subsidies was in the form of small refineries designed to operate on low sulfur crude and to produce a relatively undesirable slate of products. The small refiner subsidies created additional refining capacity ill suited to meet market demand for products..."

When examining the characteristics of the refineries which have closed between 1981 and 1984, one finds that nearly 85 percent of the closures have either been by small refineries with less than 30,000 barrels a day, which simply cannot compete with larger, more efficient competitors which have greater economies of scale; or, refineries with no downstream capacity, i.e. those unable to produce gasoline and middle distillate and other products with high consumer demand. In fact, 46 of the refineries that have closed since 1981 started during the era of the crude oil entitlements and small refiner bias programs.

This analysis is not to suggest that the domestic refining industry is inefficient or that many currently efficient refiners are not facing enormous hardship in today's highly competitive market. It merely points out that the decline in the domestic refining industry, at least up to this point, has had virtually nothing to do with the level of refined product imports. Attachment II is a recent editorial from the New York Times which makes this point very well. Since our members derive their product from the domestic refining industry, we know that it is currently facing enormous problems. Many of these problems are prompted by a wide range of factors, including declining or static consumer demand patterns and continually falling prices. This has led to fierce competition as refiners try to divide an ever smaller marketplace pie. The result has been that the value of a barrel of finished petroleum product has been driven below the official posted price of crude oil plus necessary transportation and processing costs.

While this has adversely affected all refiners, some are hurt significantly more than others. For independent refiners which must buy crude oil from a third party, the posted price of crude oil represents a real cost to them. For integrated companies, the cost of crude oil is a transfer price between two arms of an integrated company. Any profit losses occurring at the refinery level can be offset by profits earned from the crude oil production arm. For example, estimates of the cost of the crude oil purchased by Texaco and Chevron in their recent acquisitions of Getty and Gulf, respectively, indicate that the internal cost of crude oil to a major integrated company can be considerably less than the posted price paid by an independent refiner.

But even with this problem, there may be an improving picture for domestic refiners down the road. Executives for Ashland Oil, one of the nation's largest independent refiners, told Wall Street analysts recently that their company expected to prosper in 1985 for several reasons -- one of which was an expected stabilization of crude oil prices followed by a more normal price spread between crude and refined product. Ashland's Chairman and Chief Operating Officer, John R. Hall, was quoted as saying the refining business, over the long term, "...will make good money 10 out of 12 years." (See Attachment III.)

NATIONAL SECURITY

PMAA does not believe sufficient evidence currently exists to substantiate claims that product imports are threatening national security. As evidenced by earlier discussion in this statement, the level of imports into this country for gasoline and middle distillate, while up, still do not represent a substantial penetration into the U.S. petroleum product market. Moreover, the companies that are importing most of the product into the country today are American companies with a substantial amount of domestic refining capacity in their own right. In addition, these products are not coming from unstable areas of the world such as the Middle East, but from allies of the U.S. such as Canada and the Netherlands. One could almost reverse the question and ask, "Given the level and source of refined product imports, what adverse impact would a fee or quota have on U.S. foreign policy?"

While the number of domestic refineries has declined since 1981, the decline has not reached crisis proportions. Refining capacity has returned to the levels attained during the 1970's and, according to DOE, is still probably capable of meeting the total U.S. demand for petroleum products. Therefore, in the event of another embargo, there is still sufficient refining capacity to refine crude oil drawn from the Strategic Petroleum Reserve to meet consumer demand.

PMAA is, therefore, unconvinced that the current import situation presents any significant threat to national security.

FUTURE OUTLOOK

A considerable amount of attention has focussed on what impact future refined product imports will have on the domestic market. Given the success of various petroleum industry harbingers in the past, it is probably unwise to base current major policy decisions on what might or might not happen in the future. Predictions by "experts" in the past about what was going to happen in the oil industry in the future has led to unwise investment decisions in a number of areas premised on excessively high crude oil prices. This, in turn, has led to economic hardship for all aspects of the petroleum industry and several related industries, including banking, drilling and synthetic fuels.

While the uncertainty of future developments should not dictate current policy decisions, there are factors which exist which warrant concern and monitoring. One of these factors is the increased amount of refining capacity being built in the Middle East.

Forecasts by the International Energy Agency (IEA) show that OPEC nations, including Venezuela, will have refinery output of 5.95 million barrels per day in 1986, demand of 3.6 million barrels and an exportable surplus of 2.35 million barrels per day. The East-West Center Resource Systems Institute, in a DOE-commissioned study entitled, "The Changing Structure of the World Refining Industry: Implications for U.S. Energy Security," expects total OPEC and Gulf Cooperation Council nations' refining capacity to rise to 7.7 million barrels per day by 1988 with slightly less than half of that 3.51 million barrels destined for export. Saudi Arabia is expected to have the greatest share of these exports, 29.6 percent, followed by Venezuela, 22.8 percent and Kuwait, 15.5 percent.

The study estimated that approximately 610,000 barrels per day of gasoline and naptha would be for export. Approximately 40,000 barrels per day of that total stems from Iran and Iraq and is thus subject to question.

The major question is, "Where are these Persian Gulf exports going?" If all went to the U.S. markets, assuming consumption levels remain static, then that would represent 9 percent of the domestic market. Many experts consider it highly unlikely that the U.S. will receive the bulk of these exports and in fact predict they will go to Europe or the Far East, further eroding the refining centers in that part of the world.

The East-West Center points out that primarily because of high transportation costs, the U.S. is "...always the the least profitable market for Persian Gulf refiners." The East-West Center Study further states that potential U.S. imports from Persian Gulf refineries rests mostly on Saudi Arabia's Yanbu refinery which could be the source for 50,000 to 60,000 barrels per day of unleaded gasoline in the U.S. market. This source of unleaded product may be a critical factor in meeting U.S. demand for unleaded which is expected to accompany the lead phasedown program recently announced by EPA. The study concludes that Persian Gulf imports of gasoline "...can not possibly be regarded as endangering the U.S. national security." A summary of the East-West Center Study included in the March 6, 1985 edition of Energy Detente, is attached (see Attachment III).

Another scenario outlined by some refiners is that the U.S. will be awash in imported gasoline from the Persian Gulf. The concern seems to be that the Persian Gulf nations would use U.S. markets as a dumping ground either as a means to eliminate the competition provided by U.S. refiners, or to circumvent self-imposed production quotas as a means of maintaining higher crude oil prices.

Whether the scenario outlined by the East-West Center or the one feared by many domestic refiners materializes will only be known as events unfold. Clearly, marketers will be carefully watching these events and assessing their impacts. A recent study conducted by PMAA on marketing trends over the next 10 years reveals a high level of interest in the role imports will play over that period. While nearly half of the respondents thought imports would help some marketers and hurt others, only one in five marketers thought imports jeopardized national security. A complete copy of that survey has been made available for the committee's files.

The situation should be carefully monitored and if national security is threatened or if imports begin to be the source of a competitive imbalance in the domestic market, then appropriate action may be necessary at that time.

CONCLUSIONS

The Petroleum Marketers Association of America, based on currently available data, opposes any restrictions on crude oil or refined product imports. This opposition is based on several conclusions.

* The overall level of product imports are well below historic levels;

* The levels of imported gasoline and middle distillate, while up, do not constitute a serious penetration into the U.S. market;

* The sources of the imports are not unstable political countries in the Middle East, but traditional U.S. allies like Canada and the Netherlands. Less than 2 percent of the product imports come from the Persian Gulf nations;

* The problems currently facing the domestic refining industry have little to do with imports, but rather, hinge on competitive advantages some domestic refiners have over others;

- An import fee will increase inflation, unemployment, and jeopardize the economic recovery this nation is experiencing; and
- An import fee may necessitate the creation of another regulatory bureaucracy and cause more competitive imbalances than it is designed to correct.

However, PMAA strongly recommends that future developments be carefully monitored and if national security is threatened by a rising tide of imports which would again make the country vulnerable to an embargo or a supply cut off, or if imports are found to be the source of competitive imbalances in the market, then appropriate action may be necessary.

Thank you for the opportunity to submit this statement and the Petroleum Marketers Association of America will be happy to respond to any questions members of the Subcommittee may have.

ATTACHMENT #I

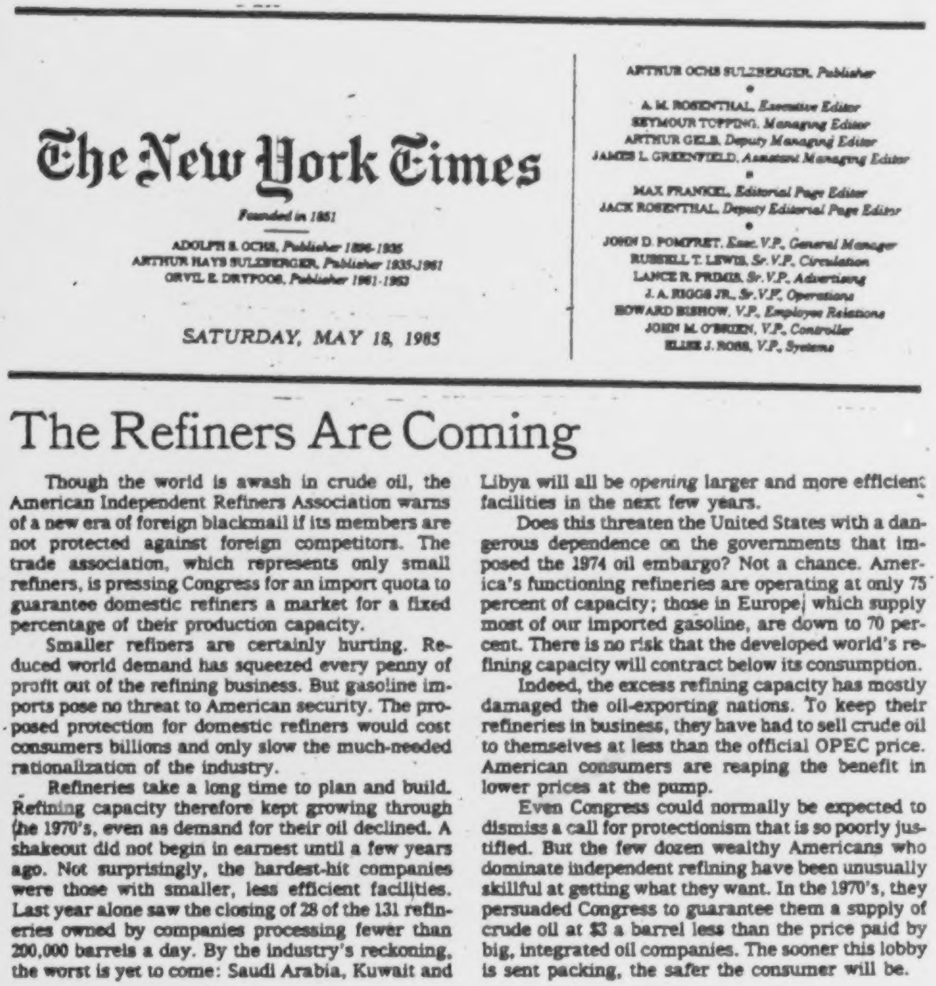
MEMBERS OF THE PETROLEUM MARKETERS ASSOCIATION OF AMERICA

The Petroleum Marketers Association of America represents the independent petroleum marketers who are members of these state and regional trade associations:

Alabama Oilmen's Association
Arizona Petroleum Marketers Association
Arkansas Oil Marketers Association, Inc.
California Independent Oil Marketers Association
Colorado Petroleum Marketers Association
Independent Connecticut Petroleum Association
Florida Petroleum Marketers Association
Georgia Oilmen's Association
Idaho Oil Marketers Association
Illinois Petroleum Marketers Association
Indiana Oil Marketers Association, Inc.
Intermountain Oil Marketers Association
Petroleum Marketers of Iowa
Kansas Oil Marketers Association
Kentucky Petroleum Marketers Association
Louisiana Oil Marketers Association
Michigan Petroleum Association
Mid-Atlantic Petroleum Distributors Association, Inc.
Mississippi Petroleum Marketers Association
Missouri Oil Jobbers Association
Montana Chapter, Intermountain Oil Marketers Association
Nebraska Petroleum Marketers, Inc.
Independent Oilmen's Association of New England
Fuel Merchants Association of New Jersey
New Mexico Petroleum Marketers Association
Empire State Petroleum Association
North Carolina Petroleum Marketers Association
Northwest Petroleum Association
Ohio Petroleum Marketers Association
Oklahoma Oil Marketers Association
Oregon Petroleum Marketers Association
Pennsylvania Petroleum Association, Inc.
South Carolina Oil Jobbers Association
South Dakota Petroleum Marketers Association
Tennessee Oil Marketers Association
Texas Oil Marketers Association
Virginia Petroleum Jobbers Association
Washington Petroleum Marketers Association
West Virginia Petroleum Marketers Association
Oil Jobbers of Wisconsin, Inc.
Wyoming Petroleum Marketers Association

The Petroleum Marketers Association of America is located at 1120 Vermont Avenue, N.W., Suite 1130, Washington, D.C. 20005. Telephone (202) 331-1198.

ATTACHMENT #II



The New York Times

Founded in 1851

ADOLPH S. OCHS, *Publisher 1896-1935*
ARTHUR HAYS SULZBERGER, *Publisher 1935-1961*
ORVIL E. DRYFOOS, *Publisher 1961-1963*

SATURDAY, MAY 18, 1985

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The Refiners Are Coming

Though the world is awash in crude oil, the American Independent Refiners Association warns of a new era of foreign blackmail if its members are not protected against foreign competitors. The trade association, which represents only small refiners, is pressing Congress for an import quota to guarantee domestic refiners a market for a fixed percentage of their production capacity.

Smaller refiners are certainly hurting. Reduced world demand has squeezed every penny of profit out of the refining business. But gasoline imports pose no threat to American security. The proposed protection for domestic refiners would cost consumers billions and only slow the much-needed rationalization of the industry.

Refineries take a long time to plan and build. Refining capacity therefore kept growing through the 1970's, even as demand for their oil declined. A shakeout did not begin in earnest until a few years ago. Not surprisingly, the hardest-hit companies were those with smaller, less efficient facilities. Last year alone saw the closing of 28 of the 131 refineries owned by companies processing fewer than 200,000 barrels a day. By the industry's reckoning, the worst is yet to come: Saudi Arabia, Kuwait and Libya will all be opening larger and more efficient facilities in the next few years.

Does this threaten the United States with a dangerous dependence on the governments that imposed the 1974 oil embargo? Not a chance. America's functioning refineries are operating at only 75 percent of capacity; those in Europe, which supply most of our imported gasoline, are down to 70 percent. There is no risk that the developed world's refining capacity will contract below its consumption.

Indeed, the excess refining capacity has mostly damaged the oil-exporting nations. To keep their refineries in business, they have had to sell crude oil to themselves at less than the official OPEC price. American consumers are reaping the benefit in lower prices at the pump.

Even Congress could normally be expected to dismiss a call for protectionism that is so poorly justified. But the few dozen wealthy Americans who dominate independent refining have been unusually skillful at getting what they want. In the 1970's, they persuaded Congress to guarantee them a supply of crude oil at $3 a barrel less than the price paid by big, integrated oil companies. The sooner this lobby is sent packing, the safer the consumer will be.

ATTACHMENT III

Ashland Believes It Can Pump Out Earnings Despite Uncertainties Concerning Oil Refining

HEARD ON THE STREET

By Ralph E. Winter

The outlook for Ashland Oil's largest business, which is oil refining, is highly uncertain. But the company's management wants investors to know they think the Ashland, Ky.-based concern can earn sizable profits anyway.

Indeed, Ashland has been telling its story so effectively that its stock closed yesterday at its 52-week high of 29⅜. Analysts, who generally applaud Ashland's ability to make money under tough conditions, aren't looking for much more near-term appreciation.

Oil refining and marketing accounted for about two-thirds of Ashland's fiscal 1984 revenue. The problem with oil refining is that prices of gasoline, fuel oil and other refined products have been dropping because of a world-wide surplus.

The price of crude oil has declined, too, but more slowly because members of the Organization of Petroleum Exporting Countries have had some success in supporting the price. As a result, many major oil companies lost money on refining last year, but earned relatively good profits from production of crude. Ashland, which produces only 9% as much crude as it refines, doesn't have that trade-off.

Ashland earned $2.13 a share from operations in fiscal 1984, but reported a net loss because of charges for the planned sale of insurance and other businesses. Because of the uncertainty about oil prices, the company declines to make an earnings forecast for fiscal 1985.

Analysts' estimates average a net of $3.39 a share, but they caution they haven't much confidence in their forecasts, because a slight change in refining margins could result in a big move up or down in profit.

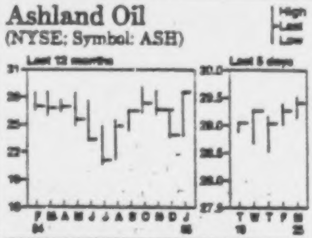
Ashland still is subject to a Securities and Exchange Commission investigation about past practices, including allegedly improper payments to obtain crude oil. Also, two former officials filed lawsuits claiming they were fired for blowing the whistle on such practices. But neither management nor analysts expect those matters to have a material financial effect.

Ashland executives give four reasons why the company will prosper:

—They think crude prices will stabilize later this year at about $25 a barrel, followed by a more normal price spread between crude and refined products.

—Ashland has some advantages in refining, which enabled the company to earn a profit from refining last year when other companies didn't: efficient refineries; a good crude supply system using mainly domestic and Canadian crude; and a good customer base among independent Midwest marketers.

Ashland has developed a profitable


Ashland Oil
(NYSE: Symbol: ASH)

Business: Refines and markets oil. Also has interests in chemicals, and engineering and construction.

Year ended Sept. 30, 1984:
Revenue: $8.25 billion
Earnings: Net loss of $172.5 million includes after-tax charge of $264.7 million.

First quarter, Dec. 31, 1984:
Per-share earnings: 64 cents vs. 66 cents

Average daily trading volume:
67,570 shares (January)

Common shares outstanding: 28 million

are combination high-volume gasoline stations and small general stores.

—Ashland has several diversified businesses, including chemical distribution and specialty-chemical production, that will produce growing profits. Chemical sales last year topped $1.5 billion, a 25% increase from fiscal 1983, and pre-tax operating profit was $55 million, up from $633,000 in recession-hurt fiscal 1983.

The refining business over the long term "will make good money 10 out of 12 years," says John R. Hall, chairman and chief executive officer. "We can make $2 a share with refining doing nothing," he says, and his goal, which he admits "will take a few years" to reach, is to earn $5 a share from the company's nonrefining businesses.

Mr. Hall says Ashland will funnel investment cash mainly into the two opposite ends of the petroleum business, its SuperAmerica retail outlets and domestic exploration and production. The chemical division will get money for acquisitions, he adds.

SuperAmerica will get $50 million to $60 million a year, which will permit opening about 50 units annually. The 335 company-operated SuperAmerica outlets sell about 25% of the gasoline that Ashland refines.

About half of SuperAmerica's sales come from gasoline and the rest from a wide range of products beyond the bread and milk found in smaller gasoline outlets. SuperAmerica has its own brand of cigarettes, which sell about $1.50 a carton cheaper than name brands, and some stores sell liquor.

Domestic oil and gas exploration will get "about $40 million a year of risk money," Mr. Hall says, plus whatever it takes to develop the oil and gas discovered, perhaps as much as $20 million a year. That plan will be re-evaluated if oil prices drop much below $25 a barrel, he says. A development program in Nigeria ends this year, and the company hasn't

ATTACHMENT #4

Energy Détente®

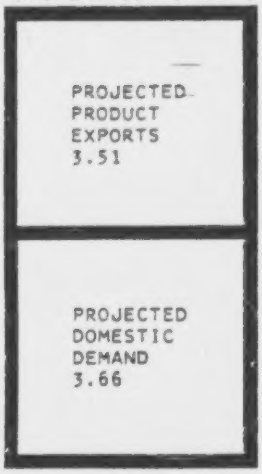
VOLUME VI NUMBER 5
MARCH 6, 1985

OPEC Downstream

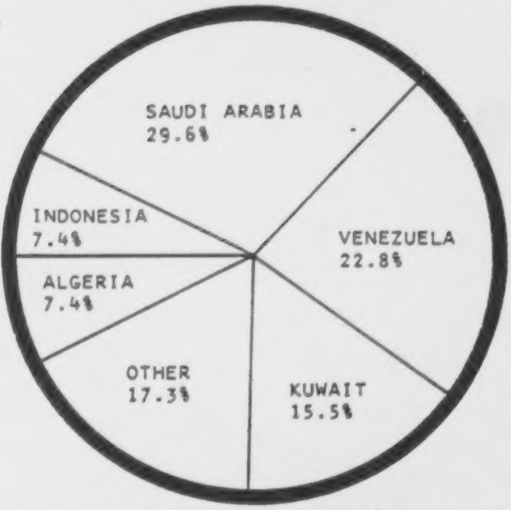
U.S. GASOLINE IMPORT DEPENDENCE: GOOD OR BAD?

DISPOSITION OF PROJECTED 1988 REFINERY OUTPUT FROM OPEC AND GULF COOPERATION COUNCIL NATIONS

TOTAL
REFINERY OUTPUT 7.05 MM B/D.



PERCENT SHARES BY COUNTRY OF PROJECTED REFINED PRODUCT EXPORTS



Source: The East-West Center

Energy Détente Chart

INCREASING U.S. refining costs and increasing non-U.S. refining capacity make for increased U.S. reliance on imports. Debate as to whether this is in the public interest is heating up, as fears mount that OPEC downstream expansion will put U.S. refiners out of business. In this issue, we access papers from experts on both sides of an issue looming on the near horizon.

Dan Lundberg, APR, Publisher Trilby Lundberg, Editor Vanna Morales, Research

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OPEC Downstream

U.S. GASOLINE IMPORT DEPENDENCE: GOOD OR BAD?

"At stake are the future of competition within the (U.S. refining) industry, our vulnerability to a product supply disruption and the security of the nation's military fuels supply as well as lost jobs and investments," reads part of the published rationale of the 15-company Independent Refiners Coalition (IRC), as it lobbies for legislative and other governmental action to prevent U.S. gasoline import dependency from putting independents out of business.

The 15* companies and a trade association, American Independent Refiners Association, formed IRC last year when they calculated that U.S. gasoline imports had risen 265% since 1981. Quoting *Lundberg Letter/Energy Detente* publisher Dan Lundberg, IRC's recent study, "Gasoline Imports and National Security," says:

> "Oil industry analyst Dan Lundberg reports that more than 100,000 of the nation's 250,000 service stations have disappeared since the early 1970s. Gasoline storage capacity has disappeared along with those stations. Although the remaining stations are doing nearly twice the volume of business, they have not increased their gasoline storage facilities... In assessing the decline in the U.S. gasoline refining storage and marketing capacity, Lundberg recently stated, 'If we ever have a run on supply again, outages are going to be far more frequent and far more disturbing.'"

Citing facts reported in the *Oil Daily*, the same study says:

> "Since 1980 more than 100,000 refinery workers have been fired, laid off or placed on early retirement... We are, in effect, exporting our refineries overseas... Some of our most productive regions could face significant declines in economic growth bordering on recession... One recent study estimated the regional impact on the Texas Gulf Coast from refinery shutdowns to be in excess of 14:1 -- each refining job lost costs 14 other jobs in the regional economy."

IRC cites the U.S. Department of Energy count of 107 refinery shutdowns between January 1981 and January 1984, warning that of 107 closures, 88 were independent refiners representing 82% of total capacity lost. IRC argues that independents supply about 25% of total gasoline and 50% of jet fuel and that "because they are dispersed geographically and are small enough to tailor production for specialty products, such as JP4 for military jets, independent refiners are vital for America's military fuel supply." IRC says remaining independents have upgraded technology to levels comparable with major oil company refiners and, domestically oriented, are unlike importers or multinational integrated majors who are "vulnerable to foreign government pressures." It argues that the U.S. refining sector no longer has significant excess capacity, and increased imports will lead to further refining capacity reduction and storage losses, translating to potentially greater U.S. vulnerability as to product supply and logistics.

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* Amber Refining, Inc.; Apex Oil Company; Ashland Oil Company; Crown Central Petroleum Corporation; Diamond Shamrock Corporation; Golden West Refining Company; MacMillan Ring-Free Oil Company, Inc.; National Cooperative Refinery Association; Paramount Petroleum Corporation; Placid Refining Company; Pride Refining, Inc.; Rock Island Refining Corporation; Texas City Refining, Inc. Tosco Corporation; and Valero Energy Corp./Saber Refining Co.

IRC published materials include this statement: "Today, nearly one of every ten gallons of gasoline sold at the pump is imported or made from imported components."

They also include U.S. Department of Commerce evidence that finished gasoline imports combined with naphtha imports accounted for 7.1% of the U.S. gasoline market in 1984. (Motor gasoline alone accounted for 4.0%.) So the figure appears closer to one in seven gallons. Nevertheless, the share that imported gasoline plus naphtha imports have of the market has grown notably from just 2.8% in 1978 (the year U.S. gasoline consumption peaked).

The IRC's paper relating gasoline imports to national security problems specifically considers the Organization of Petroleum Exporting Countries to be "targeting" U.S. product markets:

> "Foreign crude oil exporters, seeking to industrialize and maximize their leverage over the world's oil consumers, are undercutting domestic refiners' prices in products such as gasoline... OPEC countries, primarily in the Mideast, are increasing their refining capacity substantially, with more than 2-million barrels a day firmly committed to be on line by 1988, and an additional 1-million barrels per day in the planning stages. In 1984, 325,000 barrels a day came on line and 895,000 barrels a day is scheduled to start up in 1985...
>
> "Virtually all of this refining capacity is targeted for export," the paper says.

MIDDLE EAST PRODUCT EXPORT VOLUMES

The front cover graph shows the above statement to be very close to findings by the Honolulu, Hawaii-based East-West Center.

Energy Detente used figures provided in the study, "The Changing Structure of World Refining Industry: Implications for U.S. Energy Security," from The East-West Center's Resource Systems Institute. The study, for presentation to the U.S. Department of Energy January 23, 1985, itemizes individual country members of OPEC and the Gulf Cooperation Council (GCC) as to projected refined product production, domestic demand, and gross product exports. With the caveat that uncertainties resulting from the war between Iran and Iraq prevent closer estimates, the study reveals that slightly over half the region's total refinery output by 1987-88 will be absorbed by domestic demand.

For gasoline and naphtha, country figures estimated by the Center come to a potential 610,000 barrels per day (b/d) of exports from the Persian Gulf. (Included in that 610,000 b/d estimated for 1988 are possible volumes of 30,000 b/d from Iran and 10,000 b/d from Iraq, subject to giant question marks.) Note: It's important that this estimate is Gulf only, excluding other OPEC member countries and non-OPEC sources of U.S. gasoline imports.

Shares by country are calculated as:

Saudi Arabia	42.7%
Kuwait	36.1%
Bahrain	7.9%
Other	13.4%

Although an important portion of total expected 1988 gasoline export volumes would reflect country strategies for the U.S. market, it's a far stretch to consider that 610,000 b/d could be destined entirely for the U.S. market.

Still, if the entire 610,000 b/d be assumed to be incorporated into U.S. gasoline imports in 1988, Persian Gulf exporters' market penetration could be projected:

The Lundberg Survey, Inc. estimate for U.S. gasoline consumption for 1984 is about 6.7-million b/d. If no increase in consumption is assumed for 1988 (and some analysts say little increase can be expected), then 610,000 b/d would represent 9% of the market.

That's two percentage points more than the role of total gasoline imports (including from non-Persian Gulf sources) during 1984.

According to the U.S. Department of Commerce, preliminary 1984 country shares of the U.S. gasoline imports market are as follows for the top six:

Venezuela	22.6%
Netherlands	8.0%
Canada	7.4%
Romania	7.0%
China	6.7%
Brazil	6.4%

These and over a dozen other countries have already carved important shares from the U.S. gasoline import market. No doubt competition will be heating up. Price cutting could entice U.S. importers to import more, thereby enlarging the pie for country competitors to slice up. Last year, Saudi Arabia had under 1% of the U.S. gasoline import market, according to the U.S. Department of Commerce -- a share likely to grow soon.

EAST-WEST THINKS INDIES PROTEST TOO MUCH

The Independent Refiners Coalition warns that in addition of the 107 U.S. refineries closed since 1981, another 50 may close by the end of the decade.* "When our domestic refineries are closed, foreign refiners will be free to dictate product prices to the American consumers, knowing that we then will lack the ability to meet U.S. demand for gasoline," says Charles E. Walker of IRC. "It can take up to US $100-million to reopen a mothballed refinery and an average of six months to train personnel to operate equipment safely and efficiently," he says, adding that OPEC countries are not bound to a refined product price structure.

The East-West Center comments in its study for the U.S. Department of Energy, "all data indicate that independents are responsible for most of the U.S. imports of refined products."

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* Gary Refining Company, Inc., not listed as a member of IRC, announced March 4 it is filing for bankruptcy. The action is intended to preserve the operating capability of the company's 16,000 b/d Fruita, Colorado refinery scheduled to supply military jet fuel and other products from process shale oil from Union Oil Company of California's plant in Parachute, Colorado.

East-West conclusions on current U.S. imports of refined products are:

+ "Almost 60% of product imports originate from America's OECD allies, U.S. possessions and U.S. refineries in the Caribbean.
+ "Around 76% of product imports originate from the Western Hemisphere.
+ "Only 2% of product imports or 0.2% of U.S. consumption is supplied from the Persian Gulf.
+ "The current high level of imports from traditional sources may not continue as the U.S. economy slows down, other economies grow faster, and the dollar weakens.
+ "The level of imports at present is not exceptional in a historical setting either in absolute terms or in relative terms.
+ "Much of the furor over imports arises from the fact that product exporting countries have installed their own upgrading facilities, thereby increasing their relative output of lighter products.
+ "The widespread impression that the Middle East refineries are a substantial cause of the current wave of imports is unfounded. Most of these refineries are under construction or just entering shakedown, and present exports to the U.S. are negligible. This situation, however, may change abruptly in the next few years."

The Center points out that construction of export capacity by the oil exporting countries was planned when their domestic requirements were growing at relatively high rates, and was also accelerated by the fact that "OPEC nations were often discouraged from acquiring facilities in the importing countries."

PERSONALITY TYPES

The East-West Center has accomplished a stratification of world refineries in groupings according to crude sources and market outlets:

Captive refining, such as in Norway, with domestic oil reserves and domestic market, has "good control over both crude supply and market."

Market refining, like Japan, is characterized by oil imports and product flow to the domestic market: "Poor control over crude supply, good control over market."

Export refining, as with Saudi Arabia with domestic oil reserves and product for the world market, has "good control over crude supply, poor control over market."

Balance, or Entreport refining, as with the Netherlands Antilles, imports oil and processes it for world refined product markets. This is "poor control over both crude oil supply and market."

Among important upcoming gasoline marketers, Saudi Arabia, with good crude oil control and poor product market control, has joint ventures (Yanbu with Mobil, Jubail with Shell, Rabigh with Petrola). East-West says Saudi export strategy will be "strongly influenced" by the viewpoints of the joint-venture partners.

East-West has analyzed the economics of Persian Gulf refining vs. refining in the industrialized countries, and says that if capital recovery and profits are included in the analysis along with operating costs, then the profitability of the Gulf refineries drops sharply "since they are both more expensive and less amortized than their OECD counterparts." This is exactly what the Washington, D.C. lobbying group Independent Refiners Coalition is worried about. Says IRC, "State-owned refineries sell themselves crude oil at whatever price is low enough to penetrate the U.S. market with the refined product."*

But East-West's study itemizes the advantages and disadvantages of the Persian Gulf refiners, and finds that "cheap" crude oil is not required to compete in world product markets. East-West acknowledges low-cost gas resources (US $0.50 per million BTUs) which allows Gulf nations lower processing costs than elsewhere via the utiliziation of higher BTU input per barrel of output in high-energy processing operations.**

That's a plus. So is state encouragement of construction via favorable financing terms. Another plus: Construction has incorporated the most efficient, sophisticated U.S. technology, enhancing the value of product output.

A minus is, high product transport costs. This accounts for negative margins for some Gulf exports in some markets. Another minus: The U.S. is, according to East-West, "always the least profitable market for the Gulf refiners."

Based on official crude oil prices, OECD refiners have negative margins, but in the main the Gulf refiners have positive margins. East-West finds that "Gulf refiners in general will not need to discount their crudes to export refineries to be competitive in the export market."

East-East states that potential U.S. imports from Gulf refiners rests mostly on the Saudi's Yanbu refinery, which could bring 50- to 60-thousand b/d of unleaded gasoline. Along with other Gulf sources of U.S. gasoline imports, the volume "can not possibly be regarded as endangering the U.S. national security," says East-West. They further contend that the volume could lower netback on heavier crudes, "which should not be of great concern to the U.S. industry." (This is already occurring, and is proving of concern. -Editor. See ED 2/27/85.)

Energy Detente concludes that Persian Gulf, and possibly other, "source" refineries will most probably be a tough competitive force for U.S. refiners to contend with, because of favorable financing at home, availability of low-cost natural gas as refinery fuel, and because they will be using the most sophisticated U.S. refining technology available -- but apparently not because of cheap internal market prices for crude oil.

XXX

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* IRC wants gasoline import quotas, or gasoline quotas and tariffs, as an offset to Gulf advantages.

** This subject is evolving as vitally important among U.S. refiners facing a virtually leadless gasoline future (by January 1986), and will continue in Energy Detente coverage in detail. Leadiessness and possibly more stringent environmental protection requirements as to sulfur and toxic metals could do even more to the competitiveness of U.S. refiners in the U.S. market than foreign gasoline could do. - Editor

ENERGY DETENTE REFINING NETBACK DATA
U.S. GULF COAST, EARLY MARCH 1985
(OFFICIAL/CONTRACT VS. SPOT CRUDE PRICES)

PRODUCT YIELD (% BBL) HIGHER TECHNOLOGY

PRODUCT	A N S	W T I	ARABIAN LIGHT	ISTHMUS	MINAS
UNLEADED GASOLINE	17.30	23.90	21.10	20.50	19.00
REGULAR GASOLINE	17.30	23.90	21.10	20.50	19.00
DIESEL (0.5% S)	27.00	29.60	27.80	29.30	23.00
FUEL OIL (1% S)	0.00	18.60	0.00	0.00	35.00
(2-3% S)	34.40	0.00	25.90	25.70	0.00
LOSS (GAIN)	4.00	4.00	4.10	4.00	4.00
	100.00	100.00	100.00	100.00	100.00

PRODUCT WORTH ($/BBL)

PRODUCT	SPOT PRICE	A N S	W T I	ARABIAN LIGHT	ISTHMUS	MINAS
UNLEADED	31.96	5.53	7.64	6.74	6.55	6.07
REGULAR	30.83	5.28	7.30	6.44	6.26	5.80
DIESEL	30.40	8.21	9.00	8.45	8.91	6.99
F.O. (1%)	27.05	0.00	5.03	0.00	0.00	9.47
(2-3%S)	26.95	9.27	0.00	6.98	6.93	0.00
GROSS PROD. WORTH		28.29	28.96	28.62	28.64	28.33

NETBACK ($/BBL)

	A N S	W T I	ARABIAN LIGHT	ISTHMUS	MINAS
GROSS PROD. WORTH	28.29	28.96	28.62	28.64	28.33
REFINING COST	2.00	2.00	2.00	2.00	2.00
FREIGHT COST	0.00	0.50	1.00	0.20	2.00
NETBACK	26.29	26.46	25.62	26.44	24.33
OFFICIAL CRUDE PRICE	27.00	28.00	28.00	27.75	28.53
REFINERY MARGIN	-0.71	-1.54	-2.38	-1.31	-4.20
SPOT CRUDE PRICE	28.20	26.70	27.75	-----	26.65
REFINERY MARGIN	-1.91	-0.24	-2.13	-----	-2.32

REFINERY MARGIN BY PRODUCT ($/BBL)

	A N S		W T I		ARABIAN LIGHT		ISTHMUS		MINAS	
PRODUCT	A	B	A	B	A	B	A	B	A	B
UNLEADED	0.51	0.30	0.35	0.66	0.20	0.25	0.41	----	-0.11	0.25
REGULAR	0.26	0.06	0.01	0.32	-0.10	-0.05	0.12	----	-0.38	-0.07
DIESEL	0.38	0.06	-0.03	0.36	-0.17	-0.10	0.13	----	-0.49	-0.06
F.O. (1%)	0.00	0.00	-0.64	-0.40	0.00	0.00	0.00	----	-1.92	-1.26
(2-3%)	-0.71	-1.12	0.00	0.00	-1.05	-0.98	-0.77	----	0.00	0.00
GAIN (LOSS)	-1.16	-1.21	-1.22	-1.17	-1.27	-1.26	-1.20	----	-1.30	-1.23
REFINERY MARGIN	-0.71	-1.91	-1.54	-0.24	-2.38	-2.13	-1.31	----	-4.20	-2.32

A: CALCULATED FROM OFFICIAL/CONTRACT CRUDE OIL PRICE
B: CALCULATED FROM SPOT CRUDE OIL PRICE
NOTE: GASOLINES AND FUEL OIL NO. 2 (DIESEL) ARE LUNDBERG SURVEY, INC. RACK PRICES

Senator NICKLES. Thank you very much.

Mr. Rothschild.

STATEMENT OF EDWIN ROTHSCHILD, ASSISTANT DIRECTOR, CITIZEN/LABOR ENERGY COALITION

Mr. ROTHSCHILD. Mr. Chairman, I will also summarize my statement and submit the full one for the record.

I am just sitting here listening to all this debate, and having participated in energy debates, oil debates, since 1971, I'm somewhat confused and fascinated by some of the statements here. Texaco particularly stated not less than 4 years ago that decontrol was a wonderful thing. We needed to rely on the competition in the marketplace to set prices, and let's get with it. And there's going to be some rationalization, there's going to be some dislocation as a result of that, but we're prepared to do that.

We've got quotations for them galore. But here they are today representing the view of the industry, and it's shared by people like Amoco, whose vice president gave a speech at the end of last year saying we need to support OPEC. That's just what the proposal that they're coming up with to take care of our supposed problem, about increasing petroleum product imports, will do.

It is designed simply to prop up world crude oil prices, because what's happened domestically is that imports come in and there is more price competition solely because of the fact of the excess refining capacity, which has been talked about, and the excess crude oil producing capacity. So there's lots of competition.

It comes in the east coast because it's a net refiner. It's a net importing section, because there's not enough refining capacity either on the east coast or the gulf coast. It's always been importing. More competition there, prices down down there, as Mr. Tell said.

They get translated down to the gulf coast and what happens there—this is what he left out, the important thing—it forces down the price of crude. If anything has weakened OPEC and the crude oil pricing structure of the last 4 years, it is the enormous competition that has taken place in the sale of gasoline and heating oil.

We have a decline in demand. The companies had to scramble for market share, and that's what we're seeing. Most of the decline in refineries has come as a result of decline in demand, not imports. And it's unfortunate what happens to, you know, workers who work at refineries. They have dislocations like other industries and something ought to be done by the companies.

They are the ones responsible for the workers, to take care of them and have programs that see they can move them into other areas or parts of their company. But that's going to happen because of decline in demand. We could not foresee that.

So the real issue is crude oil prices. Now Mr. Hall from Ashland said in his annual meeting that some companies want to see the price of oil remain high, particularly those with expensive acquisitions. Well, here he was talking about Texaco. The reason Texaco is worried about declining prices, they're worried about declining crude prices because it makes their acquisition of Getty a real serious problem, because that was premised on roughly $25 a barrel crude.

You also have the problem domestically of vertical integration. We're talking about the issue of subsidies was raised in foreign countries and foreign refiners. Well, first of all, two of the largest refiners, all the refiners in Saudi Arabia are joint venture refineries—one with Mobil, one with Shell and one with, I think, an Italian or Greek company. So they're not wholly-owned by those countries.

Second, we have vertical integration here. All the major integrated companies have subsidized refinery operations because they make about 90 percent of their revenue on crude. So the issue is the margins that refiners see.

I applaud the independents. They are a very important segment of the industry. They are the competitive fringe. They have led the price of products down. They have sold their refined products for less than the majors. They have been the force of competition. They have forced the price of crude oil down. The latest DOE/EIA data show that the independents, starting December 1984, sharply cut the price of crude domestically and the majors had to follow suit.

That's what we ought to be looking at, how to get the crude oil prices down so the margins at the refinery level remain competitive, so that the products' prices and the crude oil prices remain in parallel.

Another point is that companies that are talking about restricting imports are in the leadership of importing products. I mean, Texaco and Apex Oil and several other members of this new coalition are some of the leading importers of gasoline and other petroleum products in the United States. They're doing it for a very simple reason. It's cheaper to buy products abroad where there's a surplus or there's more competition in bringing it in here and then help to lower prices.

The national security item was raised about the incredible new dependence on light products, particularly unleaded gasoline. Well, I mean, I don't think there's any national security implication if someone gets knocking and pinging in their car if they're driving up a hill, meaning that they take a lower lead or lower octane levels as opposed to the higher octane levels that might be needed.

There are far more national security implications from having our industry shut down or electric utilities dependent on residual fuel than there are about some suburbanites having to curtail their driving. So I don't see the national security implications at that level.

Finally, with respect to the strategic petroleum reserve, we're talking about the possibility of a decline in the refinery availability and capacity. Conceivably the Government in the same way it set up its strategic petroleum reserve could set up a strategic refinery reserve, as my friend and associate Dr. Mark Cooper has suggested. There the Government could make sure that we had readiness available, just like the Strategic Air Command, in case any kind of unforeseen threat to the national security occurs, rather than impose what could be a multibillion dollar cost on the American economy.

We've benefited from lower oil prices. Today I want to put some articles in the record, if I may, Senator, Mr. Chairman, about the benefits of lower oil prices and the fact that oil prices may be continuing to decline just in addition to my statement, if that would be OK.

Senator NICKLES. OK.

Mr. ROTHSCHILD. So we are opposed to any kind of fee or tariff on imports unless there is a real serious threat, which I think has to be specifically defined, to the national security. Otherwise the benefits to the economy, the benefits to the consumers, the benefits to all the industries that use oil in their operations are far greater than the restrictions that could be imposed.

Thank you.

[The prepared statement of Mr. Rothschild and the information referred to follow:]

STATEMENT OF EDWIN ROTHSCHILD, ASSISTANT DIRECTOR, CITIZEN/LABOR ENERGY COALITION

Mr. Chairman and members of the Committee. My name is Edwin Rothschild. I am the Assistant Director of the Citizen/Labor Energy Coalition, a nationwide organization representing over 20 million low and middle income citizens, who are consumers of gasoline, heating oil and other petroleum products. As consumers we are directly affected by changes in the price of these products. We therefore very much appreciate the opportunity to testify today on the impact of imported petroleum products on the domestic petroleum industry and on the U.S. economy.

We do not believe there is any need or justification for restricting imports of petroleum products into the United States. Our position is based on the following reasons:

* There is no longer an event -- the British coal strike -- which is precipitating a worldwide surplus of gasoline production that drove gasoline prices down between August 1984 and January 1985.

* Beginning in January U.S. refiners sharply reduced gasoline production and inventories in response to which they were able to raise wholesale and retail prices to previous levels.

* There is no evidence showing that oil company joint venture refineries in Saudi Arabia or other refineries now nearing completion in the Middle East will dramatically undercut crude oil prices by underpricing gasoline in view of the fact that Saudi Arabia like the major integrated oil companies earns the bulk of its revenues from the production and sale of crude oil.

* The modest increase in petroleum product imports which, in part, has contributed to a lowering of product prices, is not the real source of trouble for domestic non-integrated refiners. The chief problem is the inability of non-integrated refiners to obtain lower-priced crude oil.

* Even though the volume of product imports is growing, we are still importing less than we did in 1973, the year in which President Nixon formally ended the Mandatory Oil Import Program, a policy which had been costing U.S. consumers over $5 billion a year in higher oil prices.

* At a time when the oil market is becoming increasingly competitive and when imported products are an important factor in driving down domestic product prices, restricting product imports would not only harm the U.S. economy, but strengthen OPEC and other crude producers.

* The nation's security is strengthened by a strong and growing national economy. Declines in petroleum prices have reduced the inflation and unemployment rates. Proposals to restrict product imports could raise prices by 5 cents to 6 cents a gallon, or $12 to $15 billion a year. Such price increases will diminish economic growth, push up the rate of inflation and lead to additional unemployment.

* The U.S. petroleum market is undergoing rapid change. The Department of Energy is projecting only modest growth in petroleum demand and a decline in demand for gasoline. Thus, the U.S. is faced with excess refinery capacity, a condition which in and of itself leads to increased competitive pressures.

History and Context

Over the last four years we have witnessed many unanticipated consequences of the ten-fold increase in oil prices that occured between 1973 and 1981. Exxon, for example, in its 1980 World Energy Outlook assumed along with most other major oil companies, banks and governments that the upward oil price trend would continue and oil would reach $55 a barrel in 1985. The assumed increase in oil prices and the assumed growth in oil consumption obviously did not materialize. Exxon and other oil company prognosticators were dead wrong. The scarcity of oil was a temporary phenomenon -- the result of market dislocation, opportunistic behavior, greed and price manipulation. It was not a condition of the resource exhaustion.

Nevertheless, the consequences of two oil price shocks for the U.S. and world economies have been startling. The reduction in oil demand[1], the development of new oil supplies in areas outside of OPEC, the shift to other fuels, the recession, the strength of the dollar and the increased reliance on and participation in spot and futures markets have all contributed to increased competition among oil producers and refiners and to a substantial decrease in the price of oil.

Despite the decline in oil prices from $34 to $28 per barrel, the world is still awash in oil and in excess refinery capacity -- a clear indication that prices are still above competitive levels. Many economists believe that the competetive price of oil -- the marginal cost of production -- is somewhere between $15 and $20 per barrel. Arlon Tussing, former chief economist for the Senate Energy Committee, estimates oil prices should fall to somewhere between $10 and $18 a barrel. [2] Similarly, John

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1. U.S. oil use in 1984 was only slightly higher than in 1971. In fact total energy consumption in 1984 was similar to that in the early 1970's.

2. "The Oil Bust Panic," by Charles Krauthammer, The New Republic, February 21, 1983.

Lichtblau, president of the Petroleum Industry Research Foundation, believes the price in a free market "would plunge to a very low level--perhaps less than $20 per barrel--given the low production costs of most of the world's currently shut in excess capacity."[3] In other words, despite the concerns expressed about falling product prices, the reality is that these prices should fall under competitive market conditions. Only in the event that prices do not fall further or if there are efforts by companies and/or governments to prop prices up will there be cause for concern.

While the major international oil companies and OPEC have tried to prop up prices[4], they have had limited success. Despite their best efforts, the continued excess of crude oil and refinery capacity encourage price competition. Thus, on May 30 The Wall Street Journal concluded:

> It is most likely, however, that the Saudi official's call for a price cut, coupled with price cuts already applied by Egypt, the Soviet Union and several members of OPEC, will perpetuate the current slide in oil prices.

In response to these increasingly competitive conditions, oil companies throughout the world are restructuring their operations. Exxon has been spending billions of dollars to

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3. "Lichtblau: Market Won't Justify Higher Oil Price," Oil & Gas Journal, January 31, 1983.

4. See "Born Again Cartel," by Edwin Rothschild and Steven Emerson, The New Republic, November 4, 1984.

purchase its own stock. It is closing refineries throughout the world. It has given notice to thousands of its employees. Mobil has admitted failure and is seeking a buyer for Montgomery Ward. Arco has decided to abandon its operations east of the Mississippi. The raids of T. Boone Pickens have forced some companies into weakened financial positions and others into the arms of competitors. Some companies have sought refuge in the bankruptcy courts.

This then is the context within which today's hearings are being held. Many refiners under the pressure of falling margins between the cost of their raw material -- crude oil -- and the price at which they sell their products -- gasoline, heating oil, etc. -- are seeking government control over product prices through restrictions on imported products.

We believe proposals to restrict petroleum product imports are ill-advised and counter-productive. Such proposals would not only strengthen OPEC, but would damage the U.S. economy by increasing inflation and unemployment and by undermining economic growth. The real problem facing the non-integrated U.S. refiners, who are calling for import restrictions, is the high price of crude oil and the ability of major integrated oil companies to subsidize their refining operations with earnings from crude oil production.

In our view this Committee should take a close look at the way in which domestic crude oil prices are set as well as the impact of imported petroleum products. The product market has become more competitive and as a result has led to the lowering of crude oil prices. But, because the major oil companies are both oil producers and refiners, their interest in preventing further reductions in the price of crude oil is substantial. The current effort to reduce the availability of gasoline supplies is one way the major companies may be working to prop up domestic crude prices.[See Appendix A] Even if they are not taking deliberate actions in this regard, the outcome is the same.

The Economic Benefits of Lower Petroleum Prices

The benefits to the nation's economy of the decline in oil prices from $34 per barrel to $28 per barrel have been widely recognized. The Congressional Budget Office found:

> ...a sizable and permanent decline in oil prices would have a very favorable effect on inflation and on economic growth in the United States, and would significantly reduce the projected baseline budget deficit by 1988.[5]

The CBO also concluded that a $6 per barrel drop in oil prices:

* Would make available to consumers $32 billion that would otherwise be spent on oil.

* Would improve U.S. trade deficit and mean a net gain of

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[5] "Economic and Budgetary Consequences of an Oil Price Decline -- A Preliminary Analysis," Congressional Budget Office, March 1983, p. 1.

$10 billion.

*Would reduce unemployment by nearly 0.5 percent.

Former Treasury Secretary Donald Regan expressed a similar view in a 1984 memorandum [Appendix] to former Energy Secretary Donald Hodel:

> I agree that lower oil prices would bring benefits to almost everybody...There is no question in my mind that we should resist any pressure on us to prop up oil prices.

Secretary Regan's views were based on a comprehensive 1983 study by the Treasury Department which concluded that a $8 per barrel drop in oil prices (from $33 to $25 a barrel) would:

> ...lead to a real GNP increase of about 1 percent and a modest reduction in the unemployment rate of perhaps 0.4 to 0.5 percentage points. This would translate into higher employment by about 400,000 to 500,000 persons.
>
> ...reduce the budget deficit by approximately $4 billion to $5.5 billion.

And in 1983 the Department of Commerce concluded that the benefits of an oil price decline would be "widespread." The Commerce Department found that many U.S. industries would realize substantial benefits from reductions in oil prices -- transportation, electric utilities, producers of chemicals, plastics and synthetic materials for whom petroleum is a major input material. Moreover, the Commerce Department found that "schools, hospitals, and churches will realize significant savings" from lower oil prices, because these organizations

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purchase "one crude oil equivalent barrel per $1000 of gross output."[6]

A drop in price to $20 per barrel is estimated by Data Resources Inc. to provide a 5.3% increase in real GNP, a 5% gain in real industrial output and a 2.3% reduction in consumer prices.[7] And Fortune reported that "a drop in crude prices to $20 would boost car sales--now 10.6 million cars a year--to their 1973 peak of 11.3 million."[8]

Based on the results of these and other studies, the Department of Energy has concluded that imposing higher tariffs or fees on petroleum product imports might well reduce "dependence on insecure sources of supply," but would also "hurt consumers and industries, damage trade relations with our neighbors and allies, and threaten the pace of our economic growth."[9] While the Citizen/Labor Energy Coalition does not often agree with the energy policies of this Administration, with regard to this issue we are in complete agreement.

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6. "The Impact of the Expected Oil Price Decline on Individual Industries," Department of Commerce, April 12, 1983.

7. "OPEC Still Hasn't Faced Up To Reality," Business Week, February 11, 1985.[See Appndix C]

8. "Winners and Losers from Cheaper Oil," Fortune, November 26, 1984.[See Appendix D]

9. Statement of Danny J. Boggs, Deputy Secretary of Energy, before the Environment, Energy and Natural Resources Subcommittee of the Committee on Government Operations, U.S. House of Representatives, April 1, 1985.

The Role of Petroleum Product Imports in Promoting Competition and Lowering Prices

Economist Philip K. Verleger, Jr. argues that the importation of lower-priced petroleum products into the U.S. East Coast results not only in forcing U.S. refiners to reduce the price at which they sell competing products on the East Coast, but also the price they pay for crude oil. [10]

Because of the worldwide surplus of refinery capacity and tanker capacity and the lower than expected demand for gasoline and other products, competition among refiners has intensified. As surpluses build up, particularly gasoline during the duration of the British coal strike, and as transportation costs decline, the differential between the price of product oversees and in the U.S. widens. This widening differential increases the willingness of U.S. petroleum product wholesalers [including many of the refiners calling for product limitations] to import foreign product. The lower-priced imports increase competition by forcing U.S. refiners on the East Coast and Gulf Coast to reduce their product prices. "...anything that comes into the East Coast backs up product on the Gulf Coast. This results in

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10. "Export Refineries: A Pandora's Box?" CRA Petroleum Economics Report, Charles River Associates, Vol. I, No. 1, October 8, 1984.

excess supplies and weaker prices."[11] Once U.S. gasoline and other product prices fall, refiners, especially non-integrated refiners, must obtain lower cost crude oil in order to maintain their margins. These efforts, led for the most part by independent refiners, have resulted in the lowering of crude oil prices and the weakening of OPEC.

The real source of discontent among many U.S. refiners has far less to do with petroleum product imports than it does with the increasing competitiveness of the oil marketplace. The problems are part and parcel of the enormous changes that have taken place in the world oil industry since 1981. These include the sharp drop in demand and the likelihood of declining gasoline consumption in the U.S., the fact that world refining capacity exceeds demand and that non-integrated refiners, despite the efficiency of their operations, are at a competitive disadvantage vis a vis major integrated firms and are often caught in the squeeze of rapidly declining product prices and more slowly declining crude prices.

Non-integrated refiners represent the competitive fringe of the domestic petroleum industry. They not only undersell their integrated rivals, but also have been able to obtain, at least according to recent DOE data, lower priced crude oil.[See Table I] Despite their competitiveness, independents do not have the

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11. "Rising Gasoline Imports Affect U.S. Prices," PhilNews, Phillips Petroleum Company, Vol. Ten, No. 4, April 1985.

staying power that large integrated companies have. Because the major earn about 90% of their domestic income from oil and gas production, they can, unlike non-integrated firms, cushion refining and marketing losses. One independent refiner was recently quoted as saying,

> It's a game for deep pockets. We're playing with the big boys. Most of the independents, even if they've modernized to turn out enough unleaded, haven't the economy of scale to cope with current product market competition. It's captive crude that will keep the majors from folding, and that's what we haven't got."[12]

This issue was also central to the Federal Trade Commission's complaint against the major integrated companies.[13] The FTC attorneys showed how the major integrated companies controlled domestic crude oil prices through a variety of schemes ranging from controlling crude oil gathering lines to maintaining posted prices, from engaging in a network of exchange agreements to refusing to sell crude oil on the open market. Moreover, the FTC demonstrated that independent, non-integrated refiners were usually at a disadvantage and could only survive if they were able to pass through into the price of products 100% of crude oil costs. Conversely, in a period of declining product prices, an independent can only survive if he can reduce crude costs by an

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12. "U.S. Refiners Under Siege, but OPEC's Not the Problem," Energy Detente, Vol. VI, No. 6, March 20, 1985.

13. In Re Exxon Corporation, et. al., Docket No. 8934, Federal Trade Commission; see especially Complaint Counsel's First Statement of Issues, Factual Contentions and Proof, October 31, 1980.

amount equal to the reduction in product prices. An integrated firm can afford a margin squeeze, and in fact, have a vested interest in preventing crude prices from falling.

Because major integrated oil companies earn approximately 90% of their domestic income from oil and gas production, they are more concerned about crude prices. Up until recently, the existence of the Windfall Profits Tax has insulated domestic producers from decreases in the price of crude oil. A recent analysis of the decline in oil prices and its effect on producer receipts found that "the federal government absorbed 91 percent of the decline in price.[14] As the Windfall Profits Tax cushion disappears, however, further reductions in wellhead oil prices will come at the expense of producers. Recently, U.S. refiners sharply reduced production and inventories of gasoline. As a result gasoline prices have recovered and spot market crude prices are holding steady. Thus, fears of a "flood" of imported gasoline may only be relevant for the period when the refiner response to the British coal strike unavoidably created a sudden glut of gasoline. If this is the case, then the call of restrictions on imported product is weaker still.

U.S. Refinery Shutdowns and Foreign Competition

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14. "What Ails Oil," Economics Monthly, Charles River Associates, ed. by Phillip K. Verleger, Jr., January 11, 1985.

Refiners supporting product import restrictions claim that the increase in imports has resulted in the closing of U.S. refineries and that "subsidized" foreign refiners are dumping lower cost products into the U.S. But what has actually happened over the last four years -- the period of oil price decline?

Between 1981 and 1984 U.S. refinery capacity declined from 18 million barrels per day to 15. 8 million barrels per day. This decline was in direct proportion to the decline in domestic demand for petroleum products which fell from 18.8 million barrels per day to 15.7 million barrels per day. Total imports of petroleum products remained virtually the same, with the only difference being in the composition of products making up the total. (See Table II) There was an increase in gasoline and other light products and a decline in residual fuel and other heavy products. Given the huge investment worldwide in refinery upgrading, the shift away from heavy products to light products was entirely logical.

The decline in domestic refining capacity was centered, for the most part on either old, inefficient refineries or small, inefficient refineries which came into being solely to take advantage of the crude oil entitlements program adopted during the 1970's. Of the 104 refineries shut down in the United States since 1981, 52 had capacities below 10,000 barrels per day and 84 had capacities below 30,000 barrels per day. The chief reasons why refineries have been shut down, other than the end of the entitlements program, include the sharp reduction in domestic oil consumption and the recent spate of mega-mergers among major oil companies. It should be noted that refinery shut-downs are taking place all around the world.

Concern about imports originating in the Middle East are based on refinery projects either just completed or near completion in Saudi Arabia, Libya and other countries. The Saudi Arabian export refineries are 50/50 joint ventures, two of which are with multinational oil companies -- Mobil and Shell. While these refineries have all the up-to-date technology and are likely to operate at high levels of utilization, the fear of dumping is illogical. Like major integrated refiners the Saudis and their partners still earn most of their income from the production of crude oil. Dumping product assumes they are willing to see sharp drops in the price of crude as well -- something which is clearly not in their economic interest.

Oil Decontrol, Energy Forecasts and other Ironies

It is ironic, Mr. Chairman, that just four years ago some of the very companies that are here today seeking some form of federal control over domestic petroleum prices were touting the benefits to the oil industry and the U.S. economy of ending federal controls over domestic oil prices. In his March 4, 1981 comments to shareholders, Texaco Chairman John McKinley stated,

> Specifically in the United States, this year the petroleum industry will have the opportunity, for the first time in many years, to operate without price controls on crude oil and petroleum products.[15]

McKinley went on to praise the Reagan Administration's new energy policy for its "overall reliance on the free market mechanism."[16]

Texaco's joy over oil decontrol has recently turned to dismay. Things didn't work out in the way that Texaco executives and economists expected. The artificially high cartel oil prices of the 1970's have collapsed. The downturn in demand, the excess refinery capacity, the crude oil surplus, the expansion of the spot market, the emergence of futures market, the disarray among OPEC members and the conflict between domestic and international companies, between integrated and non-integrated firms and between refiners and marketers have all contributed to downward pressure on prices.

Texaco's concern over the impact of imported oil products has far more to do with its own financial condition than with national security. Texaco's acquisition of Getty Oil for over

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15. Texaco 1980 Annual Report.

16. Ibid.

$10 billion was premised on the expectation that crude oil prices would remain above $25 a barrel.[17]

The threat to the price of crude oil and the financial viability of its Getty acquisition underlie Texaco's fear of oil product imports. In addition, Texaco is a firm with many small, inefficient U.S. refineries, which in the current market are unable to compete, except for the fact that Texaco can subsidize operations through its crude oil earnings. And Texaco, unlike Mobil, does not have a joint venture export refinery in Saudi Arabia and thus cannot benefit to the degree to which Mobil is able from those exports.

Under these conditions competition and the free market are seen by Texaco and other oil refiners as a clear and present danger. Thus, on March 12, 1985 John McKinley told his shareholders of his concern about "the increased flood of foreign petroleum product imports," about the fact that foreign refiners have the audacity to compete by pricing "their exports at whatever level is necessary to sell their output into the currently saturated market." McKinley told Texaco shareholders that he expected the Reagan Administration "to turn its attention to this drift into possibly excessive depdendence on foreign petroleum product imports." Obviously incapable of admitting his affection for federal controls on imported products to prop up domestic prices, McKinley stated in an oblique yet telling fashion that "serious injury to both the economy and national security can only be avoided by conscious policy decisions."

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[17] See Fortune, November 26, 1984, "Other big losers [from a substantial decline in oil prices] could be Texaco, Mobil and Chevron, which acquired other oil companies. The acquirers borrowed heavily and paid prices based on assumptions of constant or gently rising oil prices."

These so-called "conscious policy decisions," according to a December 18 Texaco briefing paper are "limitations on product imports, such as tariffs or import fees, import quotas, tariff-rate quotas or other measures."

Another company calling for import restrictions is Ashland Oil. But Ashland likes to work both sides of the street. Even though it publicly trumpets the "threat to national security" posed by rising product imports, it tells Wall Street that the refining business over the long term "will make good money 10 out of 12 years."[18]

Conclusion

Over the last few years the U.S. economy has benefitted greatly from the decline in petroleum prices. This decline, brought

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18. "Ashland Believes It can Pump Out Earnings Despite Uncertainties Concerning Oil Refining," The Wall Street Journal, February 26, 1985.

about in large part by the existence of surplus crude oil producing capacity and excess refining capacity, ought to continue because oil prices still exceed competitive market levels. U.S. policy should be directed at encouraging more competition, not less. Prohibiting oil companies from owning production and refining would increase competition by making all U.S. refiners more willing to force reductions in the cost price of crude oil when product prices fall. On the other hand, setting up barriers to competition through product import restrictions will not only sharply increase U.S. petroleum prices, but damage economic growth and international trade.

Finally, it would be a terrible mistake for Congress or the Administration to take any action based on mere speculation of future industry developments. Because the costs of restricting oil imports would be very high, only the gravest threat to national security can justify such action. There is not now, nor is their likely to be such a threat. In the event, however, that this threat materializes, Congress will have sufficient opportunity to act accordingly.

TABLE I

OIL REFINER MARGINS
($/barrel)

Major Refiners

YEAR Month	Wght. Ave. Prod. Price	Ref. Acq. Crude Price	Margin
1984			
Jan.	35.28	28.64	6.64
Feb.	35.49	28.76	6.73
Mar.	35.03	28.75	6.28
Apr.	36.04	28.73	7.31
May	36.12	28.78	7.34
Jun.	35.45	28.71	6.74
Jul.	34.31	28.76	5.55
Aug.	33.89	28.68	5.21
Sep.	34.52	28.61	5.91
Oct.	34.94	28.56	6.38
Nov.	34.19	28.30	5.89
Dec.	32.93	28.05	4.88
1985			
Jan.	31.84	27.17	4.67
Feb.	32.17	26.67	5.50

Other Refiners

YEAR Month	Wght. Ave. Prod. Price	Ref. Acq. Crude Price	Margin
1984			
Jan.	33.60	28.79	4.81
Feb.	34.02	28.94	5.08
Mar.	33.52	29.03	4.49
Apr.	33.98	28.92	5.06
May	34.10	28.99	5.11
Jun.	33.52	29.01	4.51
Jul.	32.55	28.88	3.67
Aug.	32.17	28.71	3.46
Sep.	32.63	28.59	4.04
Oct.	33.10	28.57	4.53
Nov.	32.42	28.30	4.12
Dec.	30.79	27.62	3.17
1985			
Jan.	29.99	26.44	3.55
Feb.	30.24	25.90	4.34

TABLE II

PETROLEUM PRODUCT IMPORTS, CONSUMPTION AND REFINERY CAPACITY
(thousands of barrels per day)

YEAR	PRODUCT IMPORTS	TOTAL DEMAND	IMPORTS/ DEMAND	OPERABLE REFINERIES	REFINERY CAPACITY	AVE. REF. CAPACITY	REF. CAP. UTIL.
1973	3,012	17,550	0.17	268	13,640	50.90	93.9
1974	2,635	16,890	0.16	273	14,360	52.60	86.6
1975	1,951	16,540	0.12	279	14,960	53.62	85.5
1976	2,026	17,700	0.11	276	15,240	55.22	87.8
1977	2,193	18,690	0.12	282	16,400	58.16	89.6
1978	2,008	19,220	0.10	296	17,050	57.60	87.4
1979	1,937	19,000	0.10	308	17,440	56.62	84.4
1980	1,646	17,610	0.09	319	17,990	56.39	75.4
1981	1,599	16,660	0.10	324	18,620	57.47	68.6
1982	1,625	16,110	0.10	301	17,890	59.44	69.9
1983	1,722	15,970	0.11	258	16,860	65.35	71.7
1984	1,979	16,430	0.12	247	16,140	65.34	76.1

Source: Annual Energy Review 1984, Energy Information Administration.

APPENDIX A

PUMPING UP THE PRICE

Why U.S. Gasoline Prices Are Rising Amidst A Worldwide Oil Glut

A Research Report

By The

Citizen/Labor Energy Coalition

April 14, 1985

Introduction

Recently, economists for some of the nation's largest oil companies predicted that oil prices would stabilze and that markets would strengthen because of "particularly low" inventories of gasoline.[1] On April 8, 1985 the Oil & Gas Journal reported that U.S. gasoline pump prices had jumped by nearly 4 cents per gallon between early March and early April. This price increase was not induced by any sudden disruption in supply, but rather by a conscious decision to reduce the level of U.S. gasoline inventories to the lowest level in 10 years.

Unlike the heating oil market, where a sudden cold snap can cause a swift and sharp increase in demand, there has been no perceptible surge in gasoline consumption. On the contrary, according to data from the Department of Energy's Energy Information Administration, U.S. gasoline demand has remained flat.

What then has caused the sudden tightening in the gasoline market? The data demonstrate that actions by refiners to reduce operations, cut gasoline production and draw down inventories are behind the present situation.

Findings

* U.S. oil refiners have reduced gasoline inventories from 243.5 million gallons at the beginning of January to 217.7 million gallons at the beginning of April, at a time when they should be building inventories in preparation for the summer driving season.

* As inventories have declined, gasoline spot prices have jumped by 13 cents a gallon and retail prices have climbed by 4 cents a gallon.

* Unless U.S. refiners begin immediately to increase their refinery operations and build gasoline inventories, there will be continued pressure on gasoline prices such that consumers ould face an additional increase of 10 cents per gallon by the July 4 holiday.

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1. "Forecasts Differ on Oil Prices," Journal of Commerce, April 1, 1985

The Evidence

In the first three months of 1985 the U.S. refining industry reduced its inputs of crude oil to 11.5 million barrels a day (mb/d) from 11.9 mb/d in the first quarter of 1984 -- a drop of 400,000 barrels per day (b/d). This reduction in crude flowing through the refineries was designed to reduce the volume of manufactured petroleum products.

The decline in the output of petroleum products was focused primarily on gasoline. During the first quarter of 1984 gasoline production averaged 6.23 mb/d. But, during the first quarter of 1985, production dropped 360,000 b/d to 5.87 mb/d.

Together with the gasoline produced by the nation's refineries, imports of gasoline make up the total volume of gasoline used by the nation's consumers. Imports, however, were not sufficient to make up for the drop in production. In the first quarter of 1985, gasoline imports averaged 303,000 b/d compared to 293,000 b/d during the first quarter of 1984 -- an increase of only 10,000 b/d.

The combination of U.S. refinery production of gasoline and gasoline imports has not been sufficient to meet demand. During the first quarter of 1985 gasoline demand averaged 6.37 mb/d, while production and imports amounted to only 6.17 mb/d -- a shortfall of 200,000 b/d. This amount of demand was satisfied by drawing down inventories from 243.5 million barrels at the beginning of January to 217.7 million barrels at the beginning of April, the lowest level in 10 years. (See Table I)

As refiners drew down gasoline inventories and thereby reduced available supplies, gasoline spot market prices surged. On January 4 the New York Harbor spot market price for gasoline was 67.3 cents per gallon. By March 29, it had increased to 80.3 cents a gallon -- a jump of 13 cents per gallon. The increase in spot prices has, so far, been translated into a 4 cent per gallon increase at the retail level. (See Table II)

Unless U.S. refiners increase their gasoline production to an average of 6.7 mb/d and their refinery capacity [currently 15.4 million barrels per day] utilization from an average 75% to 77% and maintain imports at 300,000 b/d for the months of April, May and June, supplies of gasoline will be insufficient to prevent an increase in price of 10 cents per gallon by the July 4 holiday.

Compounding the current extremely low level of gasoline inventories is the decision by the Environmental Protection

TABLE I

REFINERY ACTIVITY AND GASOLINE SPOT PRICES

MONTH	GASOLINE STOCKS (mill. bbls)	CRUDE INPUT (mb/d)	GAS. PROD. (mb/d)	AVE. SPOT PR NY - $/BBL
JAN. 1985	234.00	11.50	5.90	28.
FEB. 1985	224.80	11.50	5.80	31.
MAR. 1985	217.70	11.40	5.90	32.

Source: "Weekly Petroleum Status Report," EIA.

TABLE II

GASOLINE PUMP PRICES
(cents/gallon)

City	3/6/85	4/3/85	Change
Atlanta	107.30	112.00	4.70
Baltimore	109.00	110.60	1.60
Boston	109.50	111.20	1.70
Buffalo	115.90	117.00	1.10
Miami	109.90	113.90	4.00
New York	117.00	118.70	1.70
Philadelphia	110.80	112.50	1.70
Washington, D.C.	112.10	113.80	1.70
Chicago	119.10	123.60	4.50
Cleveland	108.00	112.20	4.20
Detroit	113.60	117.60	4.00
Indianapolis	110.40	116.20	5.80
Milwaukee	114.60	118.00	3.40
Minneapolis	111.80	116.60	4.80
St. Louis	104.50	110.00	5.50
Dallas	110.20	112.70	2.50
Denver	104.60	116.30	11.70
Los Angeles	114.00	120.10	6.10
Seattle	117.70	117.60	-0.10
U.S.	111.91	115.37	3.46

Source: Oil & Gas Journal

Agency (EPA) to reduce the lead content levels in leaded gasoline by July 1. Because not all U.S. refiners are technically capable of meeting those standards, there is likely to be additional pressure on available supplies. Industry analysts estimate that the increased cost per gallon to produce lower levels of lead while maintaining octane ratings is approximately 2-3 cents per gallon.[2] Thus, an increase of anything more than this amount will be due to refinery operations and inventory management.

In 1985 as in 1984 the world is faced with an excess supply of crude oil and oil refining capacity. With oil demand increasing only modestly, there has been continuous downward pressure on oil prices.. As competition increased and gasoline and other petroleum product prices declined, profitability in refining dropped sharply. According to the Department of Energy, "The average price of gasoline in Q484 was 5.7 percent below Q483. Crude input prices, however, fell only 2.4 percent below Q483 levels."[3]

Analysis

The failure to reduce crude oil prices in reponse to the drop in product prices is due to the ability of the major oil companies to resist cutting the price of domestic crude oil. Up until recently, the existence of the Crude Oil Windfall Profits Tax has insulated domestic oil producers from decreases in the price of crude oil. A recent analysis of the decline in oil prices and its effect on producer receipts found that "the federal government absorbed 91 percent of the decline in price."[4] As the WPT cushion disappears, however, any further reduction in wellhead oil prices will come at the expense of the companies, not the government. Thus, the need to prevent further pressure to reduce crude oil prices. (See Table III)

Under conditions of excess crude production capacity and excess refining capacity, the expected economic behavior is intensified competition and price cutting to bring supply and demand into balance. ~~This is~~ what we have seen over the past several years.

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2. "Refiners Pressed By Gasoline Lead Cuts," Oil & Gas Journal, April 1, 1985.

3. U.S. Energy Industry Financial Developments, 1984 Fourth Quarter, Energy Information Administration, Department of Energy.

4. "What Ails Oil," Economics Monthly, Charles River Associates, ed. by Philip K. Verleger, Jr., January 11, 1985.

TABLE III

EFFECT OF WINDFALL PROFIT TAX ON CRUDE OIL PRICES FOR SELECTED COMPANIES -- 1984

Company		1983	1984
Texaco	Well. Price	27.00	25.29
	WPT	4.44	2.67
	Net	22.56	22.62
Arco	Well. Price	21.00	20.88
	WPT	2.11	1.61
	Net	18.89	19.27
Amoco	Well. Price	28.60	28.31
	WPT	6.51	4.63
	Net	22.09	23.64
Shell	Well. Price	26.28	26.00
	WPT	4.70	3.19
	Net	21.58	22.81

Source; Company annual reports.

Price cutting to increase refinery utilization and market share are the patterns of competitive behavior that should be taking place. Instead, we have efforts to reduce supply by reducing output and restricting competitive forces with the goal of preventing price erosion and precipitating price escalation.

While the available aggregate data tell us a great deal about overall changes in inventories, supplies and prices, they are not sufficiently specific to identify the powers behind these changes.

Based on the data, it is hypothesized that U.S. major integrated firms are unwilling to see the price of their crude oil -- the most profitable segment of their operations -- reduced further. Pressures to reduce crude oil prices occur when prices for petroleum products fall and refiners, particularly non-integrated refiners, begin reducing the price they are willing to pay for domestically produced crude oil. (See Table IV)

Recommendations for Consumers

Based on the above report, the Citizen/Labor Energy Coalition makes the following recommendations to consumers interested in ways to reduce gasoline costs:

* Shop around for the least costly gas. Because all gasoline is the same [except for octane level and lead content], shopping around for the cheapest price will help force other gasoline dealers to reduce their prices.

* Write to your member of Congress and the Justice Department for an investigation into why gasoline prices are rising when there is a worldwide surplus of oil.

* Cut back consumption by driving less and making sure that automobile is operating efficiently.

TABLE IV

SOURCES OF MAJOR OIL COMPANY EARNINGS
(in millions of dollars)
1984

Company	Expl. & Prod.	Refining	Total	Percentage
Exxon(1)	2,012	161	2,173	0.
Texaco(2)	1,994	(309)	1,685	N.
Mobil(3)	795	(4)	791	N
Chevron(4)	644	(43)	601	N
Shell(5)	1,384	223	1,607	0.
Amoco(6)	1,906	123	2,029	0.
Gulf(7)	1,187	(67)	1,120	N
Arco(8)	2,641	279	2,920	0.

Notes: (1)U.S. Earnings after income taxes.
(2)Worldwide Net OPerating Earnings.
(3)U.S. operating earnings.
(4)U.S. operating profits.
(5)U.S. Net operating income.
(6)Worldwide operating earnings.
(7)U.S. operating income.
(8)Worldwide operating income.

Source: Corporate annual reports.

APPENDIX I

CALCULATION OF REFINERY OPERAITONS NEEDED TO OBTAIN SUFFICIENT GASOLINE INVENTORIES BY JULY 1

The average inventory level necessary to avoid upward pressure on gasoline prices is approximately 230 million barrels on July 1. To obtain this level, it will be necessary to continue to import 300,000 barrels per day and increase gasoline output to 6.7 million barrels a day from the March average of 5.9 mb/d. Assuming no increase in demand over last year for the April - June period, this implies an increase in refinery utilization capacity from 75% to 77%. These calculations are based on current data contained in the EIA's 'Weekly Petroleum Status Report.

APPENDIX B

THE SECRETARY OF THE TREASURY
WASHINGTON, D.C. 20220

August 16, 1984

MEMORANDUM FOR THE HONORABLE DONALD PAUL HODEL
SECRETARY OF ENERGY

Subject: Views on Falling Oil Prices

I appreciate your calling the article from The Economist on the advantages of cheaper oil to my attention. I agree that lower oil prices would bring benefits to almost everybody, as the article concludes. There is no question in my mind that we should resist any pressures on us to prop up oil prices.

You may recall that Tim McNamar led an interagency study of this question in early 1983 when a sharp price decline seemed likely -- and in fact the price did drop by $5/barrel. That study concluded inter alia that:

-- A decline in oil prices would clearly be welcome.

-- It would contribute toward economic recovery in the industrialized and developing oil importing countries.

-- The debt servicing problems of oil importing developing countries would be eased, as a result of both lower oil bills and improved export prospects.

-- Some oil exporters would experience declines in revenue which could create new, or intensify existing, problems.

-- While these, and other such problems, will require careful attention, they do not present a threat to the world trading or financial system.

In view of the steady decline in spot prices over the last two months, my staff recently reviewed the earlier study and decided that its basic conclusions remain valid.

Don

Donald T. Regan

OIL

It was a bit like a replay of an old movie, and about as anticlimactic. For the third time in little over a month OPEC's 13 oil ministers rolled into the Geneva Intercontinental Hotel, passing smoothly from shiny cars to familiar conference rooms under the bored gaze of machine-gun-toting police guards. Two days later, they came out with a tattered communiqué that gives every sign that they will be back again for more of the same before very long.

OPEC's cure for an ailing oil market this time around was to agree to disagree. Saudi Arabia and eight other members on Jan. 30 managed to concur on modest cuts in the prices of top-quality light crudes—[illegible] per bbl. off Arab light, for instance. They also decided to press for small increases in the prices of some lower-grade heavy crudes for which demand has remained relatively strong. But Iran, Algeria, and Libya refused to go along and thus are free to do whatever they wish. Gabon, a small West African member, simply abstained.

TEMPERS FLARING. The overall result: Several oil ministers estimate the action will reduce average prices by a minuscule 30¢ to 50¢ per bbl. immediately. But that will not solve the cartel's problems. Even Indonesian Oil Minister Subroto, who obliquely dubbed the conference "not a failure, but not a success," admitted that prices might fall some more.

Moreover, with tempers flaring in the OPEC conference rooms, no one was sure how long the organization's partial accord would last. According to the angry Algerian Oil Minister, Belkacem Nabi, Nigerian Oil Minister Tam David-West vowed during the meetings that, agreement or not, his country intended to stay competitive with rival producers in the North Sea, whose oil now sells for $2.25 per bbl. less than Nigeria's latest official price. And even before the first day's session had ended, United Arab Emirates Oil Minister Mana Saeed Otaiba stalked out, shouting that David-West was "stabbing OPEC in the back."

That kind of discord weighed heavily on the oil market. As the ministers gathered, worries over sliding North Sea oil prices sent the British pound and stock market reeling (page 30). In the U.S., March crude-oil futures contracts on the New York Mercantile Exchange hit a record-low $24.66 per bbl. before bouncing back. Some analysts wondered anew if a break to $20 might be in the offing.

Twenty-dollar oil would be as bracing for the industrial world's economies as it would be devastating for OPEC (table). But John F. Mugno, an oil economist with Citicorp Information Services in New York, says that even if OPEC can keep oil prices from plunging, it can still do little more than "continue digging in its heels" as it watches prices slowly decline. "I'm in the 'gradual erosion' school," Mugno says, adding that he expects OPEC prices to slip from a fourth-quarter average of $28 per bbl. to $27 this spring, $26 next year, and $25 in 1987. At the market's peak in 1981, the average OPEC crude sold for nearly $35.

The organization's only hope now is that by keeping production low for a while longer, it will coax enough oil out of the industrial world's inventories to force buyers back to the OPEC pump. Indeed, industry sources say, Western nations now have enough oil on hand to allow them to draw down stocks by 3 million to 4 million bbl. a day, or four times the normal pace. At that rate, says one source, "all the excess inventories would disappear" by April. But if the market firms, the financial needs of many OPEC members may force them once again to break ranks, resume cheating, and, in the process, ratchet the market down another notch.

HOLLOW PROMISES. The strains are evident in rich and poor OPEC states alike. Algeria's Nabi estimates that even as small an adjustment as the one just negotiated will cut OPEC's revenues by $2.4 billion a year. It can ill afford to lose that: According to a recent study by Salomon Bros., OPEC has piled up a $67 billion current-account deficit since 1982. Moreover, Salomon estimates that every $1-per-bbl. price drop widens OPEC's deficit by $5 billion a year. It is no surprise, then, that even mighty Saudi Arabia is worried about its free-spending habits.

International bankers estimate that Saudi foreign currency reserves, which stood at $150 billion three years ago, fell below $100 billion in January. With its oil production now less than 4 million bbl. a day—down from some 10 million in the early 1980s—and Riyadh already selling less crude than it requires to cover current expenses, the Saudis no longer find it easy to throttle back their wells to help shore up the market.

The problems, of course, are infinitely more acute in Nigeria and other poorer OPEC nations. That is why each OPEC member tries to grab as much market share as it can, whenever and however it gets the chance. "This won't be the last period of price weakness," a U.S. oilman said as the latest OPEC meeting ended. Indeed, no matter how vehemently OPEC's members swear to uphold their new pact, the market finds their vows more hollow by the day.

By Ronald Taggiasco in Geneva and William Glasgall in New York

[illegible] $20 OIL [illegible] HELP [illegible] U.S. ECONOMY

1986 economic [illegible]	Crude oil at $27.50 per bbl.	[illegible]
[illegible]	[illegible]	
[illegible]	3.3%	
[illegible] (percent)	3.0%	
Consumer price increase (percent)	3.8%	
Current account deficit ([illegible])	$100.5	

[illegible]

[illegible]

Even if OPEC's production cuts stabilize prices temporarily, abundant oil along with slack demand should push them down again. That portends more growth, less inflation, and good news for industries from autos to chemicals. Even the bad news isn't so bad.

by *Edward Boyer*

[illegible] ESPITE OPEC'S efforts to [illegible] slipping. And contrary to what many of industry economists and bankers would have you believe, cheaper oil would give the U.S. economy plenty to cheer about. Estimates prepared for FORTUNE by Data Resources Inc. show that a drop in the price of oil to $25 a barrel would add [illegible] to the nation's inflation-adjusted GNP growth in 1985 and 1% in both 1986 and 1987. A steeper drop to $20 would approximately double the effect. As cheaper oil worked its way through the economy, most industries would benefit.

How far and how fast oil prices will fall no one can be certain, but market forces argue overwhelmingly for a substantial drop. The modest production cuts that OPEC [illegible] during the winter, but prices are likely to resume their descent next spring after the winter heating season.

OPEC's action was prompted by widespread discounting among strapped producing countries anxious to sell more oil. At first, price concessions came in the guise of barter deals, tax breaks, and extended credit, but by mid-October producers started resorting to out-and-out price cuts. Norway led the spree. Faced with the possible loss of Swedish and German customers, who threatened to buy cheaper spot-market oil, the country's national oil company, Statoil, slashed its light crude price $1.35 a barrel. British National Oil Corp., which was already [illegible]

[illegible]

[illegible] of the 1970s [illegible] Nigeria, which is one of OPEC's poorest members and derives more than 90% of its foreign exchange earnings from oil exports, shaved $5.50 its price. Combined with the price reductions [illegible] the nonmembers [illegible] effectively lowered average crude prices to $27.50 a barrel. "Whether or not OPEC holds its official price of $29 a barrel is academic," says Frederick P. Leuffer, an oil analyst at the brokerage firm Cyrus J. Lawrence.

EVEN THOUGH world demand for oil is estimated to grow [illegible] this year after falling for [illegible] mand is still slack. It has been dampened by greater conservation than expected in the U.S., Europe, and Japan, by the strong dollar, and by fiscal austerity in the oil-poor developing countries. John H. Lichtblau, president of New York's Petroleum Industry Research Foundation, says that about half the growth in demand was caused by last winter's excessively cold weather, the prolonged British coal strike, and the unexpected strength of the U.S. economic recovery.

Western European demand is up less than 1% from a year ago. The appreciation of the dollar against Western European currencies has raised the cost of their dollar-denominated crude oil imports to an all-time high. "The dollar's strength has given Europe its third oil shock," says Daniel Yergin, president of Cambridge Energy Research Associates, an energy consulting outfit. While the inflation-adjusted cost of oil has dropped [illegible] for the U.S. since the end of 1980, it has risen 23% for France, 17% for the U.K., and 14% for West Germany.

The debt-ridden developing countries aren't buying much oil. Brazil, the largest among them, has cut imports by half in just two years. At the same time, non-OPEC suppliers are boosting their share of world output, which has risen from 47% a decade ago to 68% now. "The ball will not bounce back into OPEC's court before the end of the decade," says Leuffer.

As oil prices come down, the eco- [illegible] which [illegible] startling [illegible] have greatly reduced their dependence on petroleum. Oil-generated electricity, for instance, has declined from a postwar peak of 16.5% of all electricity generated in 1973 to 6.5%, and manufacturing, which accounts for 40% of the nation's oil use, [illegible] to the gallon, compared with only 17.1 ten years ago. Since 1973 the oil component of manufacturing costs as a proportion of sales has shrunk at most industries. Elaine Garzarelli, director of sector analysis at Shearson Lehman/American Express, figures that, adjusted for inflation, it has fallen from 10.7% to 3.5% in the chemical industry and from 0.8% to 2.3% in steel. "The [illegible] downside," Garzarelli says, "that an oil price decline won't boost corporate profits as much as many of us thought it would."

This is how some of the nation's largest industries would be affected by declining oil prices:

▶ **AIRLINES.** They're in such a sorry state that they could use any kind of lift—and cheaper oil is a good one. Jet fuel accounts for 25% of total operating costs. The airlines consume no more fuel than a decade ago, despite a 50% increase in seat miles, but its cost has soared from 12 cents a gallon to a peak of $1.05 in 1981 and 84 cents now. A $1-a-barrel drop in the price of crude oil saves the airlines $300 million a year. Smaller carriers such as [illegible] Airlines, which fly older, less fuel-efficient planes, would gain more from cheaper fuel than carriers such as Eastern Air Lines and American Airlines, which invested heavily in newer planes. "Now that fuel is down to 84 cents, the new planes may not be such a great deal," says George James, an economist at the Air Transport Association of America. But whether the airlines can avoid destructive fare wars long enough to benefit from cheaper fuel is questionable. "They're so stupidly managed," says one security analyst, "that they may just dribble away anything they gain."

▶ **AUTOS.** Lower oil prices would benefit the industry both by trimming manufacturing costs and by stimulat-

The Good-News Club

A drop in the price of crude oil to $25 a barrel would help curb inflation, slowing the growth of the CPI by an estimated 0.7% in 1985, 1.1% in 1986 and 1.4% in 1987. A drop to $20 a barrel would slow the rise about twice as much. Lower inflation would translate into greater consumer and capital spending, which could be expected in turn to boost auto and steel production by the amounts implied. Chemical producers would benefit from the reduced cost of their petroleum feedstocks.

ing car purchases because gasoline costs less. Since energy costs represent less than 2% of the companies' sales, the greater effect would be in the showroom. According to John Hammond, an auto analyst at Data Resources, a 1% drop in gasoline prices yields a 0.1% increase in the volume of car sales. Since a $1-a-barrel drop in the price of crude can result in as much as a 2.4-cents-a-gallon decline in the price of gasoline, a drop in crude prices to $20 would boost car sales—now 10.6 million cars a year—to their 1973 peak of 11.3 million.

Consumers have tended to move back to larger, relatively less fuel-efficient cars as the price of gasoline dropped. Best prepared to meet the demand for bigger cars is General Motors, which devotes nearly 70% of its capacity to them. The comparable figure at Ford Motor is only 51%. "We haven't expanded capacity for the bigger cars as much as we should have," says Jacques Maroni, Ford's director of environmental research and energy planning. Chrysler is least prepared for a swing back to bigger cars. Its production strategy has been based on projections of continually rising oil prices. The company pared its large-car assembly facilities to 35% of total capacity.

▶ **BANKING.** Banks could be hurt two ways. They made huge loans to developing countries whose economies are roiled by falling oil prices. And they lent heavily to oil drillers, many of whom now are struggling. But the extent of the damage is hard to assess. U.S. banks have about $26.5 billion in loans to Mexico, the largest oil-exporting debtor, and $21.9 billion to Brazil, the largest oil-importing debtor. The potential damage hinges on the relative effects of cheaper oil on Mexico and Brazil. If interest rates come down as well, a $4 or $5 drop in oil prices probably wouldn't hurt much. "For the banks' foreign loans, that kind of decline would be almost neutral," says George Salem, a bank analyst at Donaldson Lufkin & Jenrette. But if oil prices dropped more than $5 and interest rates did not fall in tandem, Mexico would be hurt a lot more than Brazil would be helped, and the banks with the biggest loans to Mexico relative to their equity—Bankers Trust, Manufacturers Hanover, and Chemical—would fare worst.

Bankers and analysts, however, are not quite as worried about the foreign loans as about the banks' loans to small energy producers. "I'd rather hold loans to Mexico than to Texas drillers," says one analyst. He argues that regulators expect banks to write off bad loans to bankrupt oil drillers but are willing to let banks work out various rescheduling strategies with Third World debtors because of the political ramifications of default. It's impossible to determine how much banks have loaned to small energy companies. But one indication of risk is the frequency with which a given bank shows up on Data Resources' list of lead banks for energy companies with less than $250 million in sales. By that measure the banks that stand to lose most are Los Angeles-based First Interstate Bancorp, First City National Bank of Houston, RepublicBank Corp. in Dallas, Texas Commerce Bancshares in Houston, Central Bank of Denver, Dallas's InterFirst Corp., and Colorado National Bank of Denver.

▶ **PETROLEUM.** The effect on oil companies is skewed by the windfall profits tax, enacted in 1980 when everybody thought prices and "obscene profits" would keep climbing forever. The tax cushions the drop, at least until the price gets to $22. That's because oil companies have to pay the federal government 60 to 65 cents on every additional dollar of profit they make on a barrel of oil sold for $22 or more. Independent producers, who have enjoyed more favorable tax treatment, would absorb more of the decline. Worst off would be companies such as Atlantic Richfield and Standard Oil (Ohio) that pump a lot of Alaskan oil, which costs more to produce and currently is exempt from the windfall profits tax.

Other big losers could be Texaco, Mobil, and Chevron, which acquired other oil companies. The acquirers borrowed heavily and paid prices based on assumptions of constant or gently rising oil prices. "Chevron would be in a survival mode if the price of crude went to $20," says Charles Maxwell, vice chairman of Cyrus J. Lawrence. "Their board was convinced that it had a handle on oil prices when it bid for Gulf, but it may turn out that they were playing 'bet the company.'"

The refining end of the business is even worse off, at least in the near term. Saddled with over 30% of exces

A reduction n energy osts!" xclaims a teel industry conomist. "Nothing that ood has appened to s for a long ime."

[illegible] anyone wants it because [illegible] and they won't be able to compete with lower oil costs. Refiners have accumulated heavy inventories of high-priced oil and won't be able to sell it anywhere near cost. "They're going to lose their ass on much of their expensive inventory," says Urvan Sternfels, president of the National Petroleum Refiners' Association.

▶ **CHEMICALS.** Oil under $25 would be nothing but good news because it would reduce the cost of petroleum-based feedstocks, which along with natural gas are the industry's raw materials. Feedstock accounts for anywhere from 25% to 50% of the compa- [illegible] stock, these costs have grown twice as much as the prices of chemical products.

Producers of low-margin commodity chemicals, like the polyethylene used to make plastic wrap, would benefit more, because feedstock is a big part of the product's cost. "In some commodity businesses, you're lucky if you can break even now," says Harold May, Du Pont's senior vice president of corporate planning. "If the oil price [illegible] would go as lower." On the other hand, producers of high-margin sophisticated specialty chemicals that are used to make things like synthetic fibers and resins would benefit less because feedstock represents a smaller proportion of the finished product. Dow Chemical and Union Carbide, both of which get more than half their sales from commodity chemicals, stand to gain more than Monsanto, which gets over two-thirds of its sales from specialty chemicals. It's hard to assess the effect of an oil-price drop on Du Pont. Its earnings are about evenly split between the two segments, but it also owns Conoco, which would suffer.

▶ **STEEL.** "A reduction in energy costs!" exclaims a steel industry economist. "Nothing that good has happened to us for a long time." Lower production costs would not be the main reason for cheer; oil represents only 1% of the industry's total energy use. But the industry stands to benefit from the improved lot of many steel users. Bethlehem Steel would gain from improved sales to the capital-goods manufacturers, which buy two- [illegible] steel and National Intergroup would profit from greater sales to the automakers, which account for 20% of the steel industry's total. But companies that sell pipe and oil well casing to energy producers wouldn't do so well. Though oil field equipment accounts for only 4.2% of steelmakers' [illegible] profit margins are much higher than on other products. According to John Tumazos, a steel analyst at Oppenheimer & Co., when Armco last made money, in 1981, oil field equipment accounted for two-thirds of its operating profits. U.S. Steel would have problems. It would have to offset losses in its Marathon Oil and oil field equipment businesses.

Doomsayers worry that [illegible] the world will return to its wasteful ways. Conservation could slip some if the problem seems less urgent. But a lot of energy efficiency is embedded in the economy. Efficient new machinery will last a long time. No homeowner will bother tearing insulation out of a house. And even the larger American cars are smaller and a lot less thirsty than the gas guzzlers of a decade ago. ◻

THE CHECK IS IN THE MAIL—[illegible]

[illegible] days in Saudi Arabia [illegible] American [illegible]. "No more gold-plated toilets." Plunging [illegible] oil to shore up OPEC, the Saudis have less cash to throw around. They've cracked down [illegible] business in their [illegible]

[illegible] exactly or paperwork isn't in perfect order.

A lot of contractors are [illegible]. "Ask anyone who has bid," says [illegible] Group, a private contracting firm in Boston, pulled all of its personnel out of Saudi Arabia after the government refused to pay the remaining $90 million of a $140-million housing project the company built at King Saud University in Riyadh. The Saudis charge the work is faulty. Joseph Cell, a Carlson senior vice president, says it's common in the construction business for a client to withhold payment in proportion to the alleged faults, but the Saudis are holding back all the money [illegible]

Whittaker Corp. of Los Angeles, which has been managing hospitals in Saudi Arabia for ten years, lost a [illegible] million-a-year contract (25% of Whittaker's annual revenue) early this year when the Saudis put the contract up for competitive bidding for the first time since Whittaker won it in 1974. Steven Reid, a security analyst for Bateman Eichler Hill Richards, says Whittaker had been earning 35% of sales pretax in Saudi Arabia. "The Saudis felt they were [illegible] oil and they wised up." They are now [illegible] contracts that allow profit margins of 10% to 12%, says Reid. Whittaker [illegible] Saudi Arabia [illegible]

[illegible] held up without cause. The Saudis said they would not tolerate "negligence" on the part of contractors. The Saudi slowdown could [illegible] dent of Parsons Corp., a Pasadena, California-based builder of petrochemical and industrial plants, says many small companies broke into the market with super-low bids. "If payments slow up any more, they could be in serious difficulty," he says. "We know because some are doing work for us too." According to a New York banker, some companies are counting on the Saudis to bail them out. That's not likely. Since the OPEC price cut last year, Saudi oil revenues [illegible] billion to [illegible] billion. Construction has shrunk 25% to 30% in 18 months. In an effort to complete projects that were under way, the Saudis made up a budget deficit of about $10 billion last year by drawing on their foreign reserves, which still total more than $100 billion. But no one expects the Saudis to continue that for long; the foreign reserves are regarded as an endowment for future Saudi generations. **—Peter Nulty**

2 THE WALL STREET JOURNAL TUESDAY, JUNE 4, 1985

Saudis Warn OPEC That They Will End Oil-Price Props if Discounting Persists

By YOUSSEF M. IBRAHIM
Staff Reporter of THE WALL STREET JOURNAL

Saudi Arabia warned the Organization of Petroleum Exporting Countries that it would stop supporting world oil prices if members continued to violate the cartel's price and production guidelines.

The warning, from Saudi Arabia's King Fahd, was delivered by his oil minister during an impromptu two-day meeting called by the Saudis to deal with a slide in oil prices in the past month.

Although there was no formal statement from the meeting, which ended yesterday, OPEC officials said the date of the cartel's summer meeting would be advanced by three weeks, to June 29. OPEC ministers didn't give a reason for moving up the conference date. The semiannual ministerial conference, to be held in Geneva, Switzerland, was set for July 22.

Nine of OPEC's 13 ministers attended the meeting just concluded at the Saudi summer capital of Taif. Ministers representing Algeria, Gabon, Qatar and Libya didn't attend. Mexico, which isn't an OPEC member, was represented.

In his message, the Saudi king told OPEC oil ministers that unless all members adhered to the cartel's production quotas and stopped discounting oil prices his country wouldn't continue to sacrifice its share of world markets as a way to prop up prices. Prices are falling due to poor demand and competition among oil producers over a shrinking world market.

Strong Saudi Signal

OPEC officials took the unusual message as a signal that Saudi Arabia wouldn't tolerate a futher drop in its oil exports, already at an 18-year low of 2.5 million barrels a day. The Saudis have criticized other OPEC members for stealing Saudi markets by offering discounts. The move also is meant to support the authority of the Saudi oil minister, Ahmed Zaki Yamani, who repeatedly has warned OPEC members that violations of the cartel's guidelines may force Saudi Arabia to retaliate.

One OPEC delegate said the message "warned that he (the king) would like to see collective decisions observed collectively, otherwise everybody will be free to go about his business selling oil." The delegate, speaking in a telephone interview from Taif, said the implications of the king's message were being "taken very seriously" by OPEC members who had attended the gathering.

Commenting on King Fahd's warning, Lawrence Goldstein, executive vice president of the Petroleum Industry Research Foundation of New York, commented: "Saudi Arabia is at a threshold of production. They can't go any lower. They are telling others they too have to sell more."

Industry sources said sellers of heavy crude oil, including Saudi Arabia, Mexico and Venezuela, are hurting most as demand for the product, which yields fuel oil, has fallen steeply. The official price of heavy Mayan Mexican crude, for instance, is $3 to $5 a barrel above its free-market value in Europe and about $2 a barrel higher than its true market value in the U.S., according to industry sources.

Potential for Infighting

But a call earlier last week by Mr. Yamani for a cut in the price of heavy oil was strongly resisted by several OPEC members and the issue may trigger bitter conflict inside the cartel.

Industry sources estimate that total OPEC production stands at about 15 million barrels a day, or about a million barrels a day below the cartel's self-imposed ceiling. Within that total, several members, including Nigeria, Ecuador, Kuwait and the United Arab Emirates, have exceeded their individual output quotas.

OPEC and industry sources expect to see some recovery in oil prices in the next few weeks as several members return to the official quotas, but they said the fundamental weakness of the oil markets will again exert pressure on prices by summer's end.

OPEC [illegible] On Weakening Of Cartel Unity

Discipline in Production, Pricing Cited by Saudi In Calling Special Session

By Youssef M. Ibrahim

Staff Reporter of The Wall Street Journal

Nine ministers of the Organization of Petroleum Exporting Countries began an unexpected meeting last night in Saudi Arabia to deal with the breakdown in OPEC's pricing and production discipline that has contributed to weaker oil prices world-wide in the past month.

A meeting of the cartel's five-member Ministerial Executive Council, which monitors OPEC production and pricing, had been scheduled for yesterday. But in an abrupt switch, Sheikh Ahmed Zaki Yamani, Saudi Arabia's oil minister and chairman of the watchdog group, decided to invite the oil ministers of all 13 OPEC nations, according to officials of the organization.

OPEC sources said that by last night the oil ministers of Algeria, Libya, Gabon, and Qatar hadn't joined the gathering at Taif, the summer capital of Saudi Arabia. But the oil minister of Mexico, which isn't an OPEC member, joined the meeting as an observer. Mexican oil prices are coming under strong pressures from customers seeking a steep cut in oil prices this month and threatening to suspend contracts if prices aren't lowered.

Industry and OPEC sources said Mr. Yamani's surprise move reflects Saudi Arabia's impatience with a steep fall in his country's oil exports. Saudi Arabian exports have dropped to their lowest level in 18 years because buyers are opting for cheaper crudes from OPEC members offering unauthorized discounts. The country's production, set by OPEC at a ceiling of 4.3 million barrels a day, dropped to a low of about 2.5 million barrels daily in May, according to industry and Saudi Arabian sources.

Earlier last week, Mr. Yamani called for a cut in the prices of heavy crudes. On Saturday, however, he said the Taif meeting wouldn't deal with changes in prices, but with the breakdown in discipline by OPEC members.

"It is either success in the protection of prices and correcting improper behavior, or the collapse of prices and chaos from which no one will escape and which will harm those who defy OPEC discipline rather than those who go along," Mr. Yamani was quoted as saying by the Saudi English language newspaper Arab News.

The Taif meeting began late last night, and [illegible] for comment.

Soviet Price Cut

On Friday, the Soviet Union offered customers in Western Europe a $1 price cut on June contracts, bringing the price of its Urals crude oil to $26 a barrel. Britain, which follows the free market in setting its oil prices, fixed June sales of Brent crude, its principal export grade, at $26.50 a barrel, [illegible] a barrel below the price of comparable crude from Nigeria. The African country, an important member of OPEC, competes directly with Britain in the oil markets and will have a harder time selling its oil without discounting it to the British level.

A senior OPEC official said in a telephone interview, "It seems quite plausible the Saudis are ready for a confrontation" with cartel members who are giving discounts on their oil. In various ways, Libya, the United Arab Emirates, Iran, Ecuador, Nigeria, Qatar, Kuwait and Indonesia all are either exceeding OPEC-set production levels or discounting oil prices at the expense of Saudi Arabia, the world's largest oil exporter.

OPEC sources said Ecuador will come in for particularly harsh treatment because it is exceeding its daily production quota of 183,000 barrels by about [illegible] and has declared that it intends to push for more revenue. Senior OPEC officials said in telephone interviews that "serious consideration" was being given to suspending Ecuador's membership in the cartel. An Ecuadoran official said OPEC's charter doesn't provide any legal basis for such a move.

Nigeria's Stance

In Lagos, Nigerian National Petroleum Co. issued a statement Friday saying the meeting in Taif would "take a very hard line against any member country breaking the organization's rules." But Nigeria is exceeding its daily production ceiling of 1.3 million barrels by at least 300,000 barrels. The country also is discounting its prices in exchanging oil for goods from Italy, France, Austria and Brazil.

A July 22 meeting in Geneva, Switzerland, has been scheduled because of oil-price cuts already implemented by such non-OPEC producers as the Soviet Union and Egypt and because of cuts expected from Norway, Britain and Mexico.

But Mexico has promised to hold off any price reduction pending the outcome of the Taif meeting, according to an official of Pemex, Mexico's state-run oil company. Instead, Mexico may choose to lower oil production in an effort to firm prices, the official said. Mexico, laden with huge foreign debts, is wary of any uncontrolled fall in oil prices.

A major oil trader in Houston said the [illegible] represents the continued [illegible] of the market to lack of demand for oil "plus all the discounting, overproduction and barter dealing." He added, "I don't see what it is that can turn this market around."

Last week, Mr. Yamani called for a limited price cut in heavy crude, which is set by OPEC at $26.56 a barrel. Heavy crudes are the weakest link in the OPEC price chain because demand for fuel oil refined from them has fallen since the end of the British coal miners' strike. Britain used as many as 300,000 barrels a day of fuel oil to generate electricity during the strike. Mr. Yamani said OPEC should strive to keep other oil prices steady.

EXECUTIVE SUITE

IS BOB CARLSON THE ANSWER TO BMC'S PRAYERS?

After BMC Industries Inc.'s Chairman Ryal R. Poppa jumped ship early this year, the company's miffed directors began looking for a replacement who was markedly different from the aggressively acquisitive Poppa. They wanted someone with strong financial skills and a proven track record in operations. Now it appears the St. Paul (Minn.) company has found someone who meets those criteria: Robert J. Carlson, former president and heir apparent at United Technologies Corp.

Netting such a big fish is clearly a coup for the troubled maker of eyeglass lenses and electronic parts. The initial reaction in some quarters was that the chairman's spot at such a small company was a comedown for Carlson. Last year BMC's sales totaled $333 million, only a fraction of UTC's $14.7 billion. But a major equity position in BMC helped. "That gives me a chance to bet on myself and to bet on my organization," he says.

NO STRANGER. The odds on that wager are tough. After Poppa took over in 1982, he put BMC on a course of rapid acquisition and expansion that produced mixed results. Acquisitions in contact lenses were poor performers, and BMC's plants couldn't handle Poppa's expansion plans. Morale plummeted along with earnings, and several executives fled.

But Carlson is no stranger to management troubles. Even though he was in line for the top job at UTC, he resigned last September under pressure from Harry J. Gray, the defense giant's tenacious chief executive. In a play to extend his own tenure at the company, the 65-year-old Gray attempted to discredit Carlson before the board. Carlson, 55, emerged with his reputation intact.

He'll have to work hard to preserve it. BMC's troubles are bad enough to have frightened more than one candidate. Capping the departures before and after Poppa defected to head Storage Technology Corp., the acting chief financial officer recently quit. The company suffered a $378,000 loss in the first quarter despite a 22% revenue jump.

Carlson, considered a hard-nosed manager, says his top priorities are finding a CFO within the next two months and healing BMC's ailing balance sheet, which had become heavily laden with debt to finance acquisitions. Long-range plans, including finishing the company's move into electronics, are on hold until performance improves. "My desire is to make BMC a premier company, and the test is how well we use our assets," he says.

Another problem demanding Carlson's attention is the fallout from the December sale of $30 million in convertible subordinated notes. Four institutional investors want the deal rescinded because they say the company didn't disclose enough information and because they were surprised by Poppa's departure. Carlson is beginning talks with the four investors. The same note sale ran afoul of the New York Stock Exchange, which says it may delist BMC's stock because it did not seek shareholder approval for the sale. Carlson dismisses the problem as a technicality. Adds board member Carl B. Drake Jr.: "We can sell the stock on the Board as well as off."

Carlson solved one problem upon his arrival. Major shareholder Theodore Deikel dropped a lawsuit against BMC when Carlson promised to provide the company documents he sought. Deikel, an associate of corporate raider Irwin L. Jacobs, says he agrees with Carlson on how to manage the company. But he still wants one or more seats on the board and has not ruled out seeking control of the company. "It's about time to bring in new management," he says, "and BMC now has the right person in the chief executive's spot to do it."

By Mary J. Pitzer in St. Paul

WORLD TRADE

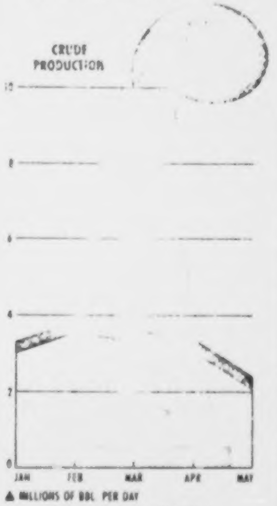
OIL PRICES LURCH TOWARD $20 A BARREL

Only a month ago, common wisdom among oil analysts, economists, and portfolio managers held that world crude-oil prices would decline only modestly over the next year. Suddenly that belief is fading. From the Persian Gulf to the North Sea to the Gulf of Mexico, oil markets are aswirl with rumors that crude prices are destined to drop toward $20 per bbl. in the next few months. "Things are really churning," says Adam Sieminski, energy analyst at Washington Analysis Corp., "and they're on the verge of getting worse." Adds a Texas oil trader: "The market's headed south."

The speculation is centered on possible price cuts by Norway, the Soviet Union, and Mexico. But the bigger question is whether Saudi Arabia will continue to watch with seeming indifference as its oil trade withers away. The Saudis, in their fourth year of battling to keep world oil prices from crashing, have seen their production slump to its lowest point in nearly two decades (chart).

With Riyadh sticking resolutely to its $28-per-bbl. base price, and with former customers going to competitors, Saudi crude output has recently fallen to as little as 2.4 million bbl. per day. That is less than a quarter of 1981's record high and 1.4 million bbl. below the level projected in the latest Saudi budget. "They're awfully fed up—actually mad—about how everyone is cheating and selling oil in barter deals," says an oilman with close Saudi ties. "Things will crack in June and July," he adds, "including, maybe, the price."

THE OIL MARKET SQUEEZES SAUDI OUTPUT



DATA: PETROLEUM INTELLIGENCE WEEKLY, PETROLEUM INDUSTRY RESEARCH ASSOCIATES, CENTRAL INTELLIGENCE AGENCY

The first test of Saudi Arabia's state of mind will come on June 2, when Oil Minister Ahmed Zaki Yamani meets with his counterparts from Venezuela, Nigeria, Indonesia, and the United Arab Emirates in the Saudi summer capital of Taif to review market conditions and OPEC production in preparation for a full OPEC meeting in July. By then, a proposal sources say OPEC discussed in February—slashing prices to $22 per bbl.—could be on the agenda again. Or, says William D. Hermann, Chevron Corp.'s chief economist, OPEC "may just dump the price a buck or two as a gesture."

Unfortunately for OPEC, says Hermann, neither move would do much in the short run to spur sales. The International Energy Agency predicts that oil use in the noncommunist world will increase less than 1% this year despite an economic recovery. Recently, world demand for OPEC crude has run as much as 1 million bbl. below the cartel's ceiling of 16 million bbl. per day. Yet the organization's financially pressed members have regularly pumped as much as 400,000 bbl. per day more than their assigned quotas. "The Nigerians have been pushing out 1.7 million or 1.8 million [bbl. per day], when their quota is 1.4 million," says Gary N. Ross of Petroleum Industry Research Associates. Indeed, Ecuador is now threatened with expulsion from the cartel for producing some 100,000 bbl. above its quota of 183,000 bbl. per day and for stridently vowing to raise production 20,000 bbl. more by yearend despite OPEC's rules.

Perhaps OPEC can bring Ecuador and Nigeria into line, but the oil ministers will have a far harder time coping with other members. For example, Iraq, whose oil sales have been crippled by its war with Iran, expects to open a 500,000 bbl.-per-day export pipeline across Saudi Arabia this fall—new oil that is likely to eat further into Saudi Arabia's market share—and is about to begin work on another line three times as large.

'BIT TESTY.' OPEC is also simply unable to cope with the burgeoning club of competitors. Nonmembers, "pricing under OPEC's umbrella to ensure market penetration," have increased production 33% since 1979, says Ross. This year, countries such as Britain, Norway, Angola, China, India, Colombia, and Egypt will boost non-OPEC production by a further 600,000 bbl. daily. On top of that, the Soviets have been stepping up exports to raise cash. Says Smith Barney, Harris Upham & Co. analyst Daniel F. D. McKinley: "OPEC is looking at a pretty long stretch at pretty low production levels. They're going to get a little bit testy as to who gets a piece of the pie."

Curiously enough, the oil market is taking these grim tidings with equanimity. Because so many refiners expect prices to fall, everyone is keeping inventories to a bare minimum. This buy-only-what's-needed-now policy has reduced production enough to give spot markets a healthy boost. But the strength masks OPEC's real problem: The Saudis have painted themselves into a corner. Their oil output is so low, says economist Richard R. O'Brien at American Express Bank in London, that their ability to "sustain the oil price is getting weaker and weaker." But if Saudi Arabia tires of defending everybody else's market, a wholesale price rout could result. Either way, it looks as if the oil market's next big move will be down.

By William Glasgall in New York, with bureau reports

COMMENTARY

BY STAN CROCK

WHY CONGRESS COULD LET THE RAIDERS RUN FREE

As the takeover tide surges, executives are flocking to Congress to seek protection. Sympathetic lawmakers conscientiously hold hours of hearings, decry the outrageous tactics of both raiders and incumbent management, and obligingly introduce a passel of bills. All this might seem to make it a foregone conclusion that Congress will do something to halt the corporate carnage.

Not so. Even as the lawmakers begin drafting legislation, the prospects for its passage are fading. Legislators are realizing that some takeover practices could be stopped with more diligent use of current securities laws. Beyond that, Congress is learning how complex the issues are and how rapidly court decisions and new takeover techniques can change the mergers and acquisitions landscape. As a result, legislation could easily become obsolete before the ink dries. Declares Gordon S. Macklin, president of the National Association of Securities Dealers (NASD): "The courts and the market may well outrun Congress."

A prime example of why Congress probably won't act is Representative Mike Synar of Oklahoma. Merger madness has pummeled few states as hard as his. The four-term Democrat represents a district not far from the Bartlesville home of Phillips Petroleum Co., the largest private employer in the state. The company today is groaning under the enormous debt it swallowed to stave off attacks by raiders T. Boone Pickens Jr. and Carl C. Icahn. While the siege was on, thousands of Phillips workers feared for their jobs.

SELF-CORRECTING? Synar thus would seem to be a logical ally for business lobbyists who want legislation to blunt the raiders' onslaught. But like many other lawmakers, he has doubts about what Congress should do—and even if it should do anything at all. He wonders whether a recent Delaware Supreme Court decision allowing Unocal Corp. to discriminate against Pickens in its stock repurchase and giving directors great leeway in devising defensive tactics has put the brakes on the whole process, making legislation unnecessary. He notes something else that gives him pause: Phillips Chairman William C. Douce's comment that the raids he fought so bitterly produced a better, leaner company. Synar "went into the issue thinking there's a problem to be solved," says an aide, but now he believes "the free market is doing its own correction."

Nevertheless, Congress is gearing up for legislation. Hearings in both the House and Senate are scheduled to end in June. Although he hasn't settled on a bill, Senator Alfonse M. D'Amato (R-N. Y.), chairman of the Senate banking securities subcommittee, wants to finish committee work by July 4. And Representative Timothy E. Wirth (D-Colo.), chairman of the Energy & Commerce Committee's finance subcommittee, has finally revealed his tentative ideas for legislation. In a little-noticed session with the National Association of Manufacturers on May 23, Wirth said legislation probably should:

- Require bidders to have financing in place before they make an offer.
- Restrict the takeover involvement of federally insured lending institutions.
- Reduce the 10-day period investors have to disclose ownership of 5% of a company.
- Force bidders to disclose the impact of their offers on the community.

Wirth also unfurled the "shareholder democracy" banner, saying lawmakers should require equal treatment for all holders. This would eliminate two-tier tender offers, common-stock classes with different voting rights, and targeted tactics such as Unocal's stock repurchase.

In spite of the jockeying, the fact is that congressional support for any new measures is hardly a sure thing. The Securities & Exchange Commission, the NASD, and the exchanges can act on some of the politically popular shareholder democracy issues and undercut congressional efforts. SEC Chairman John S. R. Shad, for instance, hints that the agency may adopt a rule to overturn the Delaware Unocal-Pickens decision. The SEC may also force the NASD and the exchanges to uphold the "one share, one vote" principle and block dual classes of common stock. In addition, some controversies just evaporate. Many companies have adopted bylaws barring greenmail payments, defusing 1984's major issue. Even Wirth recognizes that legislation may be too rigid for fast-moving markets and dealmakers. So despite all of Congress' efforts and rhetoric, takeover legislation can't be counted on.

Economic Scene

Robert D. Hershey Jr.

Refiners' Bid For Protection

WASHINGTON

EIGHT years ago the United States imported 8.8 million barrels of oil a day, about 48 percent of its total needs. Alarmed by such heavy dependence on foreign suppliers, President Jimmy Carter started a program of price decontrol and other steps that he said would guarantee that the 1977 import level would never be exceeded.

Higher prices, combined with recession, worked to produce a spectacular decline — far steeper and faster than anyone expected. This year imports are running at well under 4 million barrels a day and few people worry any longer about America's energy security. The Reagan Administration, in fact, now proposes to save money by suspending further purchases for the Strategic Petroleum Reserve — a stockpile of oil intended to be drawn upon in an emergency.

But many of the nation's oil companies, including some of the international giants, think the country is again becoming dangerously vulnerable. This time their worry is not about supplies of crude oil but about the nation's diminished capacity to refine oil.

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Imports of cut-rate gasoline and other refined products pouring in from Venezuela, China, Rumania and elsewhere now take more than 5 percent of the total American market, and more than 15 percent on the East Coast. A severe squeeze on profit margins and the ending of Government-mandated subsidies have led to the closing of more than 100 refineries since 1981, reducing operable capacity to 15.6 million barrels a day, from 18.6 million.

Niculae Asciu

With half a dozen new state-owned refineries being brought into operation by members of the Organization of Petroleum Exporting Countries, American refiners have decided it is time to seek protection from the Government.

They say that OPEC countries, more interested in maximizing revenues than in profitability, can undersell even the most efficient American refiner. Selling cut-rate gasoline is also a way to skirt OPEC's official oil prices.

The American refiners say that by maintaining since the 1950's only a trivial 1.25-cent-a-gallon tariff on imported gasoline, the Government is in effect condoning a new form of import dependence. Overreliance on foreign refined products — and the accompanying atrophy of domestic capacity — is just as worrisome as overdependence on foreign crude. They question, in fact, whether in a crisis the United States would be able to refine its now-sizable oil stockpile.

"Our strategic reserve for gasoline is our refining industry," says Joseph L. [illegible], an official of Texas City Refining Inc., a member of the Independent Refiners Coalition.

But would it really be a good idea to limit imports of gasoline, such as by a flexible quota system that would go into effect when the utilization rate of American refineries falls below a pre-established floor?

Although the refiners' argument relies heavily on the possible risks to national security — and therefore cannot be fully rebutted in purely economic terms — the case for protection is not very persuasive.

For one thing, protectionism in other areas of trade has raised prices in the past. For another, there is little likelihood of a shortage of domestic refining capacity in the foreseeable future.

The utilization rate for American refineries was only 76.7 percent during April and even a major drawdown of the reserve could be handled with little strain. And in a pinch some idled capacity could be restarted, although in many cases that could not be done overnight or without substantial cost.

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Previous efforts to restrict petroleum imports, moreover, have distorted the market, held prices up and, paradoxically, caused huge refineries to be built in the Caribbean rather than in the United States.

Most of the large companies in the oil industry have not participated in the current campaign for import restrictions. But the Mobil Corporation, which has a big stake in a new 250,000-barrel-a-day refinery that opened last year in Saudi Arabia, is opposed to the idea.

Mobil says that quotas or higher tariffs "would delay rationalization of the industry, waste capital and labor, and cost the consumer money for the sole benefit of special interests."

THE JOURNAL OF COMMERCE, Thursday, May 9, 1985

Not the Answer

AS AMERICAN OIL REFINING companies grapple with the problems of oversupply and increased imports, many industry officials are pushing for tariff hikes or the introduction of quotas as a quick fix for the industry's ills.

While it's true the decline in demand and rising import levels have put some of the nation's refiners on shaky financial ground, a tariff on imports is not the answer. Neither is a quota system like that used in Japan.

Refiners point to the troubled state of the industry as emphasis for the need of such measures. They talk of capacity of U.S. refineries being at only 76 percent and of the 140 refiners — about 18 percent of the industry — that have closed their doors since 1981.

But many of those refineries were inefficient companies that entered the business solely to take advantage of federal entitlement programs during the 1970s. The entitlement system allowed smaller, less efficient refineries the luxury of competing on price with more efficient firms.

Imports of gasoline and gasoline components are currently about 500,000 barrels a day, or about 10 percent of national consumption. It's difficult to work up much sympathy for an industry losing 10 percent of its market to foreign competition when you consider Japanese automakers and foreign steel producers control over 20 percent of their respective U.S. markets.

If the suggested tariff of 7 or 8 cents a barrel were applied to imports of refined products it would cost American consumers at least $536 million per year, enough to keep Amtrak rolling for about 10 months. Should the U.S. consumer subsidize an industry that cannot keep pace with foreign competition, especially in light of the first quarter profits most refining companies enjoyed?

Ashland Oil Inc. Chairman John R. Hall points out that U.S. refiners pay market rates for their crude — currently about $28 per barrel — while refineries in OPEC countries may be buying their crude at cost, for as little as $3 per barrel. He also complains of the high costs associated with meeting federal environmental protection and worker safety standards.

To be sure, these costs hurt U.S. companies against foreign competition. But what of the cost of an import tariff to American consumers and industries? An immediate increase in the cost of energy is only the first stage of the eventual price surges that would result down the line. The cost of production and of American exports would soon jump, as well.

Refinery industry officials concede that even a 7 to 8 cent per barrel tariff would not be enough to offset foreign price advantages. Tariffs are not enough, they say, something else is needed — quotas. They suggest we follow the Japanese example and limit gasoline and gasoline blendstocks imports to less than 10 percent of the market.

Apart from casting the United States as hypocritical, as it seeks to open Japanese markets, there are many disadvantages to such an idea. While quotas have been known to help U.S. industries in the past, such benefits have almost always been at the consumer's expense. The 20 percent quota on Japanese auto imports, for example, reduced consumer options while resulting in a $1,000 increase in the price of autos sold in this country. There is reason to believe that gasoline quotas would have a similar effect.

In addition, any levying of quotas or tariffs on refined products would bring swift retaliation from U.S. trading partners. Not the kind of atmosphere in which to conduct a new round of GATT trade talks that the president has been seeking for 1986.

The Senate Energy Committee conducts hearings on this matter next month. Hopefully, the effects of such programs on the American consumer will be considered before the committee makes its recommendations.

Ashland Believes It Can Pump Out Earnings Despite Uncertainties Concerning Oil Refining

HEARD
ON THE
STREET

By RALPH E. WINTER

The outlook for **Ashland Oil's** largest business, which is oil refining, is highly uncertain. But the company's management wants investors to know they think the Ashland, Ky.-based concern can earn sizable profits anyway.

Indeed, Ashland has been telling its story so effectively that its stock closed yesterday at its 52-week high of 29[illegible]. Analysts, who generally applaud Ashland's ability to make money under tough conditions, aren't looking for much more near-term appreciation.

Oil refining and marketing accounted for about two-thirds of Ashland's fiscal 1984 revenue. The problem with oil refining is that prices of gasoline, fuel oil and other refined products have been dropping because of a world-wide surplus.

The price of crude oil has declined, too, but more slowly because members of the Organization of Petroleum Exporting Countries have had some success in supporting the price. As a result, many major oil companies lost money on refining last year, but earned relatively good profits from production of crude. Ashland, which produces only 8% as much crude as it refines, doesn't have that trade-off.

Ashland earned $2.13 a share from operations in fiscal 1984, but reported a net loss because of charges for the planned sale of insurance and other businesses. Because of the uncertainty about oil prices, the company declines to make an earnings forecast for fiscal 1985.

Analysts' estimates average a net of $3.39 a share, but they caution they haven't much confidence in their forecasts, because a slight change in refining margins could result in a big move up or down in profit.

Ashland still is subject to a Securities and Exchange Commission investigation about past practices, including allegedly improper payments to obtain crude oil. Also, two former officials filed lawsuits claiming they were fired for blowing the whistle on such practices. But neither management nor analysts expect those matters to have a material financial effect.

Ashland executives give four reasons why the company will prosper:

–They think crude prices will stabilize later this year at about $25 a barrel, followed by a more normal price spread between crude and refined products.

–Ashland has [illegible] advantages in refining, which enabled the [illegible] to earn a profit from refining last year when other companies didn't: efficient refineries, a good crude supply system [illegible] domestic and Canadian crude, and a good customer base among independent Midwest marketers.

–Ashland has developed a profitable retailing system. SuperAmerica outlets are combination high-volume gasoline stations and small general stores.

–Ashland has several diversified businesses, including chemical distribution and specialty-chemical production, that will produce growing profits. Chemical sales last year topped $1.5 billion, a 25% increase from fiscal 1983, and pre-tax operating profit was $55 million, up from $633,000 in recession-hurt fiscal 1983.

The refining business over the long term "will make good money 10 out of 12 years," says John R. Hall, chairman and chief executive officer. "We can make $2 a share with refining doing nothing," he says, and his goal, which he admits "will take a few years" to reach, is to earn $5 a share from the company's nonrefining businesses.

Mr. Hall says Ashland will funnel investment cash mainly into the two opposite ends of the petroleum business, its SuperAmerica retail outlets and domestic exploration and production. The chemical division will get money for acquisitions, he adds.

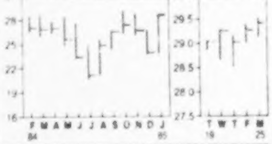
SuperAmerica will get $50 million to $60 million a year, which will permit opening about 50 units annually. The 335 company-operated SuperAmerica outlets sell about 25% of the gasoline that Ashland refines.

About half of SuperAmerica's sales come from gasoline and the rest from a wide range of products beyond the bread and milk found in smaller gasoline outlets. SuperAmerica has its own brand of cigarettes, which sell about $1.50 a carton cheaper than name brands, and some stores sell liquor.

Domestic oil and gas exploration will get about [illegible] million a year of [illegible] money, Mr. Hall says, plus whatever it takes to develop the oil and gas discovered, perhaps as much as $20 million a year. That plan will be reevaluated if oil prices drop much below $25 a barrel, he says. A development program in North Sea ends this year, and the company hasn't any plans for other overseas exploration.

Ashland Oil

(NYSE, Symbol: ASH)



Business: Refines and markets oil. Also has interests in chemicals, and engineering and construction.

Year ended Sept. 30, 1984:
Revenue: $8.25 billion
Earnings: Net loss of $172.5 million includes after-tax charge of $264.7 million.

First quarter, Dec. 31, 1984:
Per-share earnings: 64 cents vs. 66 cents

Average daily trading volume:
67,570 shares (January)

Common shares outstanding: 28 million

Senator NICKLES. Thank you very much for your comments, and to all the panel we appreciate your comments.

Mr. Griffith, you basically came out on the same position, opposed to any additional tariff or quotas or import restrictions, left maybe a little bit of a caveat. If our domestic refining capacity fell substantially, and that would be an undefined, then maybe Congress should take a look at it. Is that correct?

Mr. GRIFFITH. Yes.

Senator NICKLES. Do you as an independent oil marketer buy your gasoline and diesel, and from where?

Mr. GRIFFITH. I buy from two refinery sources. One is DX Refinery at Tulsa, and one the Conoco refinery at Ponka City.

Senator NICKLES. You've also seen several refineries—as was mentioned earlier by Mr. McGough—that several Oklahoma refineries have shutdown. Have you noticed a lack of competition? Have prices gone up or whatever from the fact that there's less potential suppliers in your vicinity?

Mr. GRIFFITH. No, sir, we've not seen it. We have seen a logistics problem. People who had been pulling historically, say, out of Enid, OK, all at once had to add additional trucks and go to Tulsa or go to Ponka City, or, you know, say from Woodward. We've seen a logistics problem, an expense to them that way, but the product has been available.

Senator NICKLES. You mentioned also the hassles you went through under the price control days in the early 1970's, mid-1970's. You mentioned a pretty strong preference that Congress not reenact that type of burden.

Mr. GRIFFITH. Well, we would certainly hope that that would never happen again. If, in the event anything like that ever happened again, we would hope, I would hope personally that Congress would have some kind of a trigger-in and trigger-out mechanism on any regulation, because we had regulations in the 1970's through a period where they were totally not needed.

And had there been some formula that said when supplies reach this point the controls are triggered off automatically, because the way they were, they were just there. The people who had jobs there didn't want them to go off. It was a difficult situation.

Senator NICKLES. Mr. Van Arsdall, have the farmer cooperatives shutdown any of your refineries?

Mr. VAN ARSDALL. A couple of years ago we shutdown a large refinery about 18 months after the Iranian revolution, NE Chicago, that's owned by six regional cooperatives, and there was a small one shutdown in Scott's Bluff, NE, that had been in business for about 40 years about 2 years ago, and another one in Kansas that was shutdown and only brought back on stream at a minimum level to produce asphalt to try to take care of some of the fixed costs.

Senator NICKLES. Are you looking at several others? How many refineries does your association represent?

Mr. VAN ARSDALL. Not counting the one that's refining asphalt, we have five operating refineries.

Senator NICKLES. Are they in danger? Are they in the very marginal classification today?

Mr. **Van Arsdall**. I think any independent refinery that doesn't have crude earnings to offset its refining losses, given that some of the product imports have been coming in at a level that is less than you can net back by buying crude oil in the marketplace is being drained and severely financially stressed. They are all still operating and serving that operating market right now. We hope to be survivors over the longer term.

Senator **Nickles**. I appreciate that.

Mr. Sternfels, has your group, the National Petroleum Refiners Association, taken a position on the tariff bills, either in favor of or against? I know you have some division.

Mr. **Sternfels**. Well, it's clear that we do have a good deal of contention within the industry, and our membership represents most of the industry, as to what kind of solution would be most efficacious or if at all one could be implemented. We have not taken a position on the bills. I think it would be extremely difficult for us to do so in view of the kind of policy development work that we had to go through to achieve the statement we have.

We do address the question of tariffs and quotas to some extent in asking that they be considered either independently or in combination as a possible solution to this matter. I would also emphasize that for our petrochemical membership that they have a great deal of concern about any type of program restricting imports of either crude or product that has some effect of disadvantaging them.

And, of course, we are supportive of their concern in this area because they may have contributed to the positive balance of trade equation in this country over a long period of time, and we are concerned that although it's diminishing that I'm sure that the Congress and the country want to maintain that.

But, on the whole, it's clear that the majority of our membership supports some very quick action to remedy the lack of, let me say, concern foreign countries have about what they're doing to our refining industry, and try to motivate the Government to demonstrate that there is more concern about the domestic refining industry in this country than we have heretofore seen.

We believe there is a national security problem involved. I would like to make one analogy in response to your question, though. In the context of this concern, the time to act is not when a train is coming down the track, particularly if it's a high-speed train that has a very unhappy effect on you if you happen to be near it when it goes by, it's coming at you. The time to act is before it gets there.

Once you're past the point of shutting down those refineries or dismantling part of the industry, I don't think you can ever remedy that in time to save a lot of economic dislocation as well as the other policy and national security concerns that have been previously mentioned.

Senator **Nickles**. Well, I appreciate your comments and look forward to reviewing some of the suggestions that you've made.

I apologize again to our panel. The fact that our first panel took so long, it set back the hearing to some extent and necessitated that some of our members attend some previously scheduled meetings. But I do appreciate your attendance before the committee.

I'd also like to note for the record that there may be additional questions that will be submitted to you and we appreciate your prompt response to those.

With that, the committee is adjourned.

[Whereupon, at 12:55 p.m., the hearing adjourned.]

APPENDIXES

APPENDIX I

Responses to Additional Questions

Department of Energy
Washington, DC 20585

September 25, 1985

Honorable Don Nickles
Chairman, Subcommittee on Energy
  Regulation and Conservation
Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

On June 4, 1985, Deputy Secretary Danny Boggs appeared before the Energy and Natural Resources Subcommittee on Energy Regulation and Conservation concerning the impact of imported petroleum products on the domestic petroleum industry.

Following that hearing, you submitted written questions for our response. Enclosed for your information are the answers to those questions, which also have been sent directly to the Committee staff.

If you have any questions, please have your staff call Cathy Hamilton on 252-4277. She will be happy to assist.

Sincerely,

Cathy J. Hamilton
for Robert G. Rabben
Assistant General Counsel
for Legislation

Enclosure

POST-HEARING ANSWERS TO QUESTIONS

Resulting from the

JUNE 4, 1985, HEARING

Before the

SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION

Of the

COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

WITNESS: DANNY J. BOGGS
DEPUTY SECRETARY

QUESTION 1. Please provide the Subcommittee with the Department's assessment as to why 111 refineries shut down since 1981.

ANSWER 1. These refineries were closed for reasons common to the refining industries in other countries, as well as for reasons peculiar to the U.S. refining industry. Refining capacity has been in oversupply worldwide since 1979, when oil product demand began to decline. Shutdowns have been widespread in most oil refining centers, as refining companies attempted to streamline operations to bring them in line with shrinking markets.

To a large extent, this contraction of refining capacity from earlier levels is due to the general decline in the price of and demand for oil products over the past 4 years. Oil demand in the U.S. peaked at nearly 19 million barrels/day in 1978, declining to a current level of about 15.6 million barrels/day. In response to these market forces and other events, U.S. refinery capacity fell from 18.6 million barrels/day in 1981, to a current level of about 15.7 million barrels/day, about equal to total demand.

The problems facing sectors of the U.S. refinery industry in this period of contraction were exacerbated by government policies which fostered the construction of many small and relatively inefficient refineries in the 1970's. These policies included crude oil price controls and the accompanying entitlements program that assured crude supplies to U.S. refiners at below-market prices, as well as the special subsidy to small refinery known as the small refiner bias.

The termination of these Government programs contributed to shutdown of the marginal, inefficient refineries. Ninety one of the 111 refineries which have shut down since 1981, were small refiners of 30,000 barrels/day or less capacity.

QUESTION 2. In the Department's opinion, have the closing of those 111 refineries affected U.S.consumers in any way?

ANSWER 2 The U.S. consumer has clearly benefited from the shakeout which has occurred in the refinery industry. The closing of these less efficient refineries has resulted in a leaner, more efficient and competitive refinery industry in the U.S. These efficiency gains have been passed to the U.S. consumer in the form of lower prices.

The price of gasoline has fallen over the past four and one-half years. When we compare June 1985 to January 1981, a gallon of unleaded regular gasoline was about 5 percent more expensive in 1981; 30 percent more expensive in constant 1985 dollars; and 45 percent more expensive in terms of the average citizen's income. This progress is even more remarkable, when one considers that State and Federal excise taxes increased over the same period (Table 1).

As shown in Figure 1, the overall price spread--the pump price, less crude oil cost and taxes--has also declined. The May 1985 spread was 31 cents per gallon for unleaded gasoline; five years earlier, with a complex regulatory system in place, the spread was almost 42 cents per gallon, about 37 percent higher in nominal terms. Adjusted for inflation, the price spread for unleaded gasoline has clearly declined over the past four and a half years (figure 2).

As shown in Figure 3, the price spread for unleaded gas was about 8 cents per gallon higher than the spread 6 months earlier. Similar increases occurred in mid-1981, 1982 and 1983. The spread declined by over 10 cents per gallon in the six months ending January 1981 and the first few months of 1983; the decline was about 7 cents per gallon in six month periods ending in early 1982 and 1984.

As shown in Figure 4, at no time in the past three and one-half years has the price spread been higher than it was in the same month two years earlier. The spread has increased in recent months as a result of normal seasonal changes, as well as recovery from abnormally low refiner margins in early 1985. The recent increase in gasoline refining margins is in part a return toward equilibrium market conditions in which margins for individual products reflect full recovery of production costs. This equilibrium was upset during 1984 by the U.K. coal miners' strike in April 1984 and the rising value of the U.S. dollar. The strike created a large increase in fuel oil demand in

Europe, together with a surplus of light products (gasoline and middle distillates). The strong dollar made it especially attractive to export those light products to the U.S. market. The influx of light products depressed prices, resulting in the unusually low gasoline margins throughout 1984 and early 1985. By March 1985, the miner's strike had effectively ended, the dollar began to weaken, and the pressure of light product imports on refining margins eased.

The important point to keep in mind is that prices fluctuate in a free market. Moreover, there is no particular virtue in a market without fluctuation. If the spread for gasoline had not taken its varied pattern of decline and had instead declined absolutely smoothly from May 1980 to May 1985, consumers would have paid nearly $30 billion more for gasoline than they actually paid under a free market.

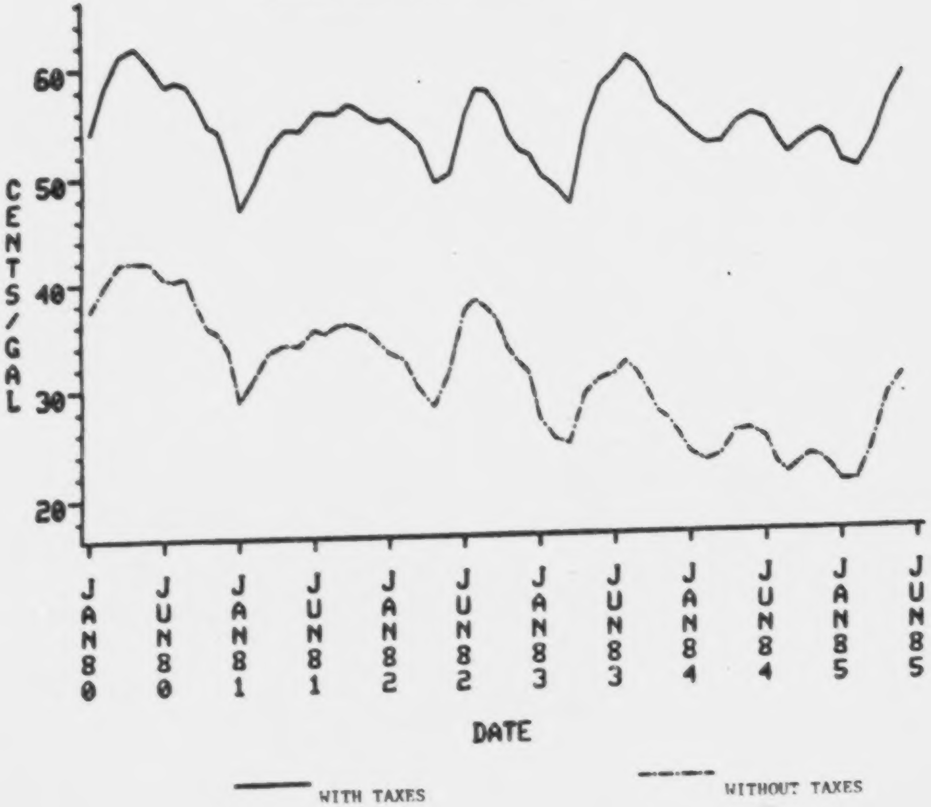
TABLE I

UNLEADED GASOLINE PRICES

YEAR	MONTH	CENTS PER GALLON
1981	January	129.8
	June	139.1
1982	January	135.8
	June	130.9
1983	January	122.8
	June	127.7
1984	January	121.6
	June	122.9
1985	January	114.8
	June	124.1

Source: Bureau of Labor Statistics

Figure 1
PRICE SPREADS, 1980-1985
UNLEADED GASOLINE LESS CRUDE OIL



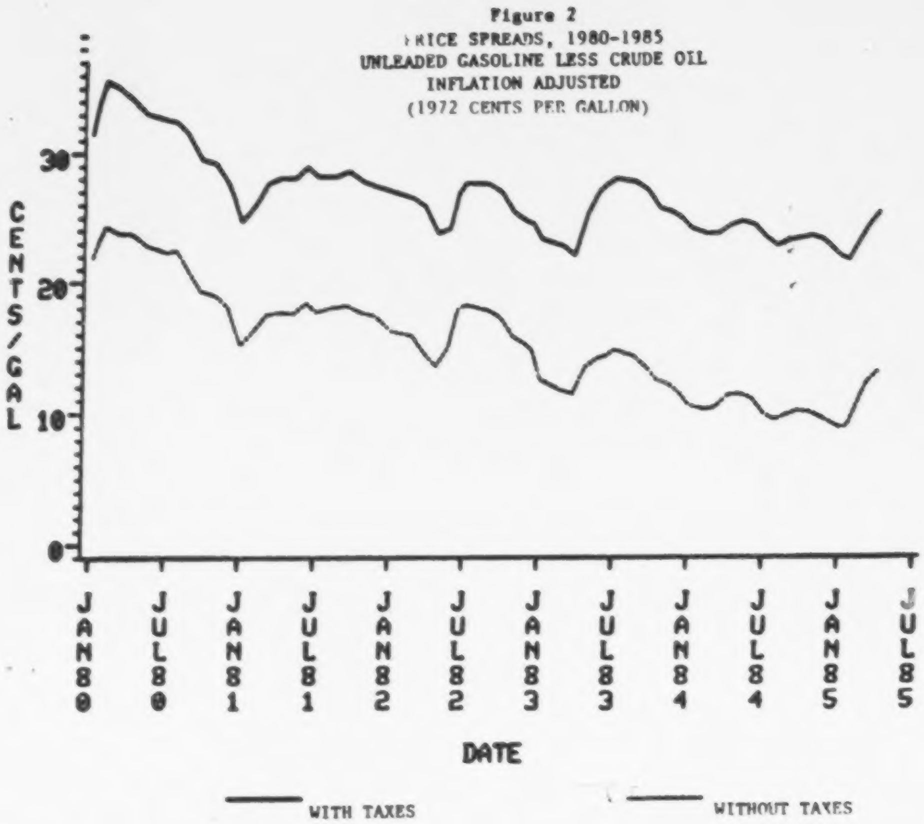


Figure 2
PRICE SPREADS, 1980-1985
UNLEADED GASOLINE LESS CRUDE OIL
INFLATION ADJUSTED
(1972 CENTS PER GALLON)

Figure 3

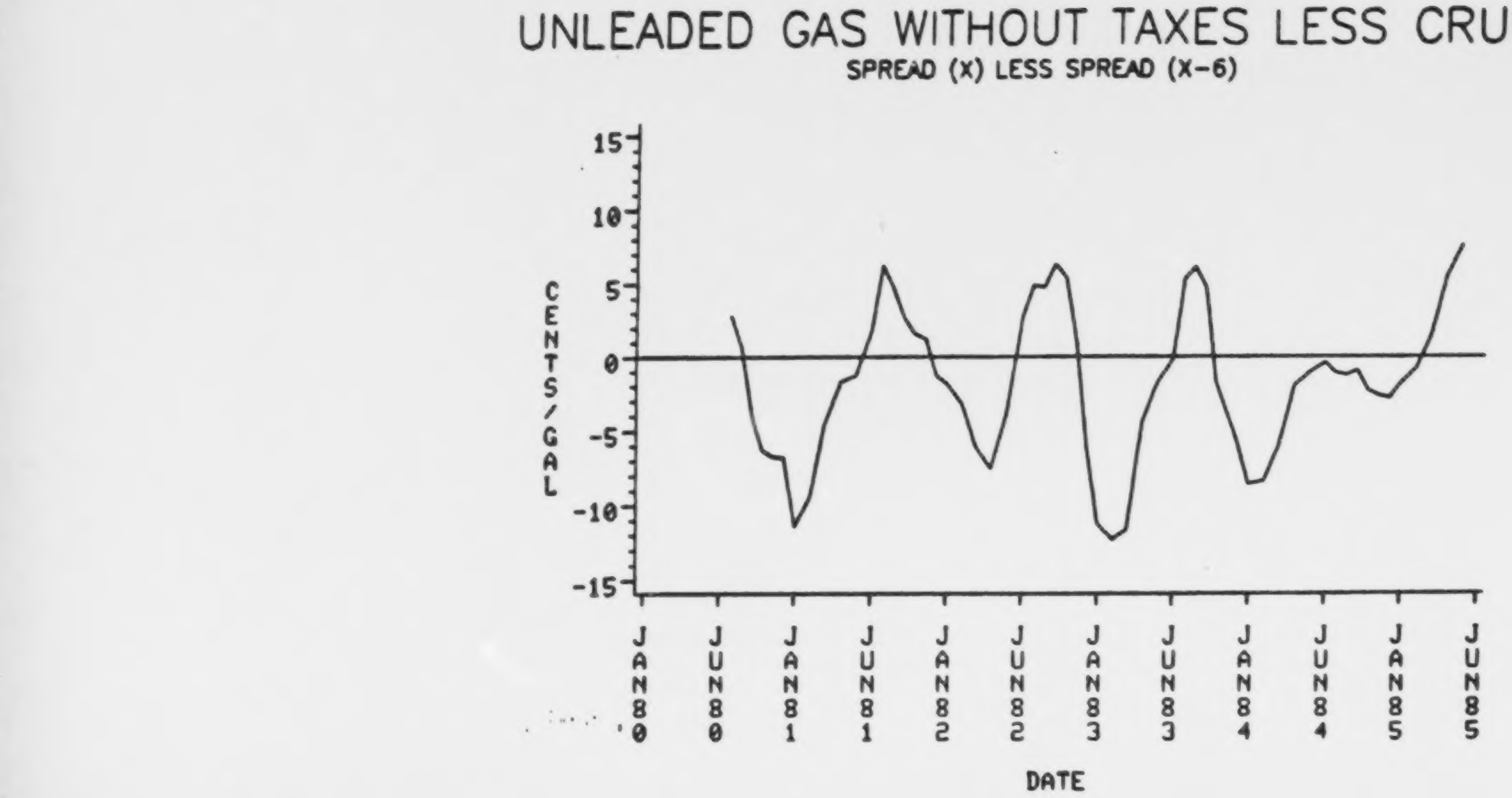
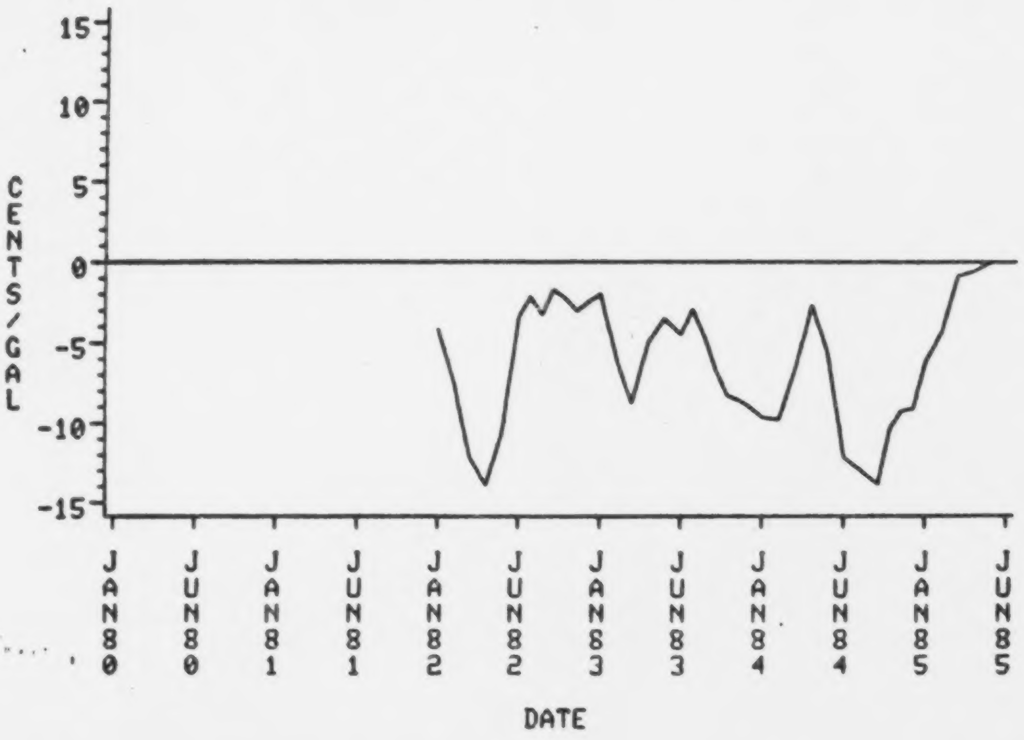

UNLEADED GAS WITHOUT TAXES LESS CRUDE
SPREAD (X) LESS SPREAD (X-6)
CENTS/GAL
15
10
5
0
-5
-10
-15
JAN80
JUN80
JAN81
JUN81
JAN82
JUN82
JAN83
JUN83
JAN84
JUN84
JAN85
JUN85
DATE

Figure 4

UNLEADED GAS WITHOUT TAXES LESS CRUDE

SPREAD (X) LESS SPREAD (X-24)



QUESTION 3.
a. How much refining capacity does the U.S. have?
b. How much refining does the U.S. need?
c. How much of U.S. refining capacity is currently "excess"?

ANSWER 3. The Energy Information Administration estimates that current U.S. refining capacity is 15.7 MMBD, which is about equal to current U.S. oil demand of 15.6 million barrels/day. About 14.4 million barrels per day (MMbd) of primary distillation capacity is in operational status, and another 1.3 MMbd of capacity is reported to be in "idle" status, meaning that it could resume service within 30-90 days.

The amount of refining capacity that the country "needs" is best determined by the operation of the market. We would be able to be process all domestic production at current production rates as well as the drawdown capacity of the Strategic Petroleum Reserve with refinery capability of about 12 MMBD, significantly less than is currently available.

QUESTION 4. In the Department's opinion, at what point will a decline of U.S. refinery capacity have a material impact on U.S. energy security?

ANSWER 4. The Administration will not allow refinery capacity to get so low that national security is threatened. We believe there is no reason to be concerned based on the trends that are emerging at this time. To begin with, our level of dependence on oil product imports is simply not that great. In 1984, net oil product imports accounted for only 9 percent of our total oil demand while gasoline imports accounted for only 5.5 percent of our gasoline demand. Secondly, the U.S. traditionally imports products from many countries. In 1984, oil products were obtained from over 30 countries, many of which are in close proximity to the U.S. Such diversification promotes national security by avoiding dependence on a small number of unstable sources.

Third, we have substantial domestic refinery capacity which is about equal to current consumption. If there were a severe interruption, crude would be in short supply--not product.

The Department of Energy monitors the refinery capacity situation closely to insure that we can meet our needs for petroleum products in the event of an energy emergency. In addition, the Department of Energy continues to carry out discussions and analyses with the Department of Defense regarding their petroleum product requirements. These discussions are integral to our plans and analyses for dealing with potential emergencies. The Departments of Defense and Energy also have participated in several exercises which test our ability to respond to emergencies of various types including those involving general mobilization.

QUESTION 5. a. Does the Department believe that foreign countries are subsidizing their refiners as is indicated in the May 1985 ITC study?

b. Does the Department believe that foreign refiners are using this subsidy to compete unfairly?

c. What, if anything, should the government do to prevent these subsidies from adversely affecting our petroleum industry?

ANSWER 5. The ITC study was initiated for the purpose of gathering information on foreign governments' policies regarding natural resources pricing and, among other things, analyzing the competitive advantage that such policies may confer on their domestic industries vis-a-vis U.S. industries. While the study indicated that such pricing policies for natural gas by some countries provided a significant competitive advantage to their petrochemical industry, it is not clear that a similiar situation exists in the case of crude oil and refined petroleum products.

As the ITC study points out, the Department of Commerce has ruled that under current U.S. law, foreign government subsidy programs that are generally available to all industries are not countervailable. No finding heretofore has been made that any such subsidy program is an unfair trade practice under any provision of U.S .law, and we do not believe it would be appropriate to express an opinion on this question without carefully examining the relevant facts. DOE has not analyzed the pricing and other related policies of the more than 30 countries which, in a typical year, export petroleum products to the U.S. As a result, the Department cannot offer an assessment of the "fairness" of particular countries' product export practices.

In general, the Department opposes the imposition of import fees or quotas. We believe that such protectionist measures would be counterproductive and would shelter U.S. industry from market forces, delaying the process of making the U.S. refinery industry competitive.

QUESTION 6. In the Department's opinion, what will happen to U.S. refining margins and U.S. refiners when the export refineries under construction in Persian Gulf countries and elsewhere go into operation?

ANSWER 6. A number of factors impact refiners' margins, including competition from petroleum product imports. Currently, margins in the U.S. refining industry have suffered from the worldwide surplus of refining capacity resulting from the decline in demand for petroleum products, from the high of 18.9 million barrels per day in 1978 to the current mid-1985 level of 15.6 million barrels per day. Refiners have also felt the adverse impact of the weakness in light product prices, particularly gasoline, relative to crude oil prices. Small refiners have experienced a squeeze on profit margins with the elimination of special subsidies. In addition, exogenous events in the energy market such as the U.K. coal strike, have affected refiners' profitability by reducing light product margins.

The impact of newly completed export refineries on U.S. refinery margins will be modest. According to a recent study done for DOE by the East-West Center, Europe and the Far East will be the most natural markets for products from those refineries. Transportation cost differentials make the U.S. a less attractive market.

QUESTION 7. At what point will the shutdown of U.S. refineries threaten the use of Strategic Petroleum Reserve oil?

ANSWER 7. In view of the current level of U.S. refining capability (15.7 MMB/D) and the trends taking place in the industry in response to lower levels of petroleum demand, we do not think U.S. refining capability will fall to levels that would limit our ability to make full use of the SPR. If one were to consider a particularly drastic scenario, whereby the U.S. would be relying only on its domestic crude production and SPR drawdown, refinery capability would be needed to process about 11.3 million barrels per day (at current rates of oil production, about 9 MMB/D, and current maximum SPR drawdown rates, 2.3 MMB/D). If some foreign crude were available for importation, other refining capacity would be needed either in the U.S. or in other countries from which the U.S. could then import refined product. Even under these circumstances, it is highly unlikely that sufficient refining capability will not be available to make full use of the SPR.

QUESTION 8. The East-West Center report, which the Department commissioned, concluded that:

> "If products are suddenly dumped, in a subsidized fashion, into the U.S. market, this could cause closure of a number of efficient, sophisticated refineries that ought to remain open in the long term. While long-term equilibrium may favor the efficient refiner, it is the short term in which firms must remain in business. While every effort should be made to avoid interference with the market, the U.S. should be prepared for the fact that trade barriers or abusive subsidization elsewhere might under certain circumstances require government action to protect efficient refiners from short-term bankruptcy."

What is the Department's analysis of this statement?

ANSWER 8. The East-West Center report cited short-term dumping only as a possibility that should be considered. The report did not state that such dumping was likely to occur. Based on the various studies, assessments and other information available to us, we do not believe it is very likely that other countries will engage in large-scale dumping in the U.S. market. Such dumping would require large subsidies and the offending countries would face the risk of U.S. retaliation.

If it is determined that foreign refiners are using unfair trade practices, such as dumping, to export refined oil products to the U.S., domestic refineries have access to remedial action under current law, to prevent such practices from harming the domestic industry.

Q-9. The East-West Center report also noted that when surplus refining capacity is eliminated, a new kind of security risk could emerge. The report stated that "The destruction of refineries in politically unstable areas, through war or terrorism, could cause serious shortages if there is no slack refining capacity elsewhere."

What is the Department's analysis of that statement?

A. The Department does not believe that, at the present time, serious shortages could arise under credible scenarios involving the destruction of foreign refining capacity. The Department will continue to monitor and evaluate the world oil situation and its impact on the U.S. as part of its energy emergencies preparedness function.

Question 10: How high would an import fee have to be to make the U.S. refining industry competitive?

Answer: The U.S. refining industry is among the most efficient and competitive in the world and will likely remain so in the foreseeable future. While it is possible in theory to estimate the approximate level of an import fee required to prevent all imports, the cessation of imports will not make the U.S. refining industry more competitive nor improve national energy security.

The economic problems which the U.S. refining industry has been facing are the result of a number of factors, including the overall decrease in oil demand, the end of oil price controls and subsidies for small refiners, and increasingly competitive energy markets. Currently the U.S. imports approximately 8% of petroleum products supplied domestically, which is down slightly from last year. The adjustments the U.S. refining industry has made to date have kept the industry competitive in the tough world market.

Imposition of a petroleum product import tariff would allow inefficient refineries to continue to operate, thus making the industry as a whole less competitive. The protection of the domestic refining industry would impose several other undesirable consequences as well.

Lower energy costs benefit U.S. consumers and ensure that our economic growth can continue unimpeded. Steps taken to prevent imports would raise the cost of all refined products to domestic consumers. These steps would also allow the price of other fuels that compete with oil, such as natural gas, to rise. Consequently, the price of most energy-intensive goods and services in the U.S. would rise. In addition, higher domestic energy costs could significantly reduce the competitiveness of our products overseas, thereby reducing domestic employment and aggravating the balance of trade.

The Reagan Administration has consistently supported free trade as a means of achieving a strong domestic economy and reduced inflation. In response to our resolve, all International Energy Agency member countries, including Japan, recently agreed to move as expeditiously as possible to market oriented arrangments with respect to all petroleum product imports. In particular, Japan currently imposes barriers against the import of gasoline and other light products; under a regime of free trade in gasoline and other petroleum products, Japan would be a likely customer of the new export refineries in the Middle East. Should refined product exports from the Middle East reach peak levels, action by Japan to ease trade restrictions would help U.S. refiners by reducing the amount imported into the U.S. Any action on our part to impose a trade barrier would undermine this agreement and invite a wave of retaliatory protectionist measures by other International Energy Agency member countries.

Most of our refined product imports come from a variety of sources. Venezuela, the largest supplier of gasoline in 1984, accounted for less than 15% of total imports, or less than one percent of U.S. consumption. The top four suppliers, which include the Virgin Islands, the Netherlands, and Brazil as well, accounted for only 40% of gasoline imports. To impose trade barriers against these trading partners would be highly damaging to our relations with these countries and other allies. In addition, the Virgin Island refineries are owned mostly by U.S. firms and individuals.

Q-11. Since most of our imports of refined petroleum products are from government subsidized facilities, wouldn't these governments just increase their subsidies to retain their share of the U.S. market?

A. It is unclear what is meant by the term "government subsidized facilities" or the extent of U.S. imports from such facilities. In 1984, the U.S. received more than half of its refined oil products from OECD nations and the Caribbean, including U.S. territories. Only about 27 percent of U.S. refined oil product imports came from OPEC sources.

Countries which export refined oil products to the U.S. and which also have access to low cost domestic crude could in theory offset a U.S. import fee by reducing the price of the crude to their refineries. It is more likely that they would seek to market their products in more advantageous markets, assuming other importing countries do not raise their trade barriers in response to U.S. restrictions.

It should be noted that the imposition of an import fee, in addition to penalizing the U.S. consumer, will also penalize those exporting countries that do not engage in subsidies.

Q-12. Is there any way to help our ailing domestic refining industry other than import fees or quotas?

A. The U.S. refining industry has gone through a shakeout period in response to the substantial change in the demand for products, to excess capacity and to anomalies in the market due to government interference. The industry is now recovering by closing inefficient operations and improving its ability to minimize costs.

The best way to assist the industry is to continue to pursue policies that will help maintain the strong growth of the economy experienced over the past several years, as well as policies that will allow and encourage the industry to make the necessary adjustments to remain competitive. Import fees or quotas, by contrast, would weaken economic growth and impose artificial barriers on the industry that would reduce competition and subsidize the inefficient.

Q-13. Would you prefer a quota or an import fee?

A. The Administration opposes the imposition of either quotas or import fees. Government intervention in the market would be counterproductive, increasing costs to consumers and delaying the adjustments needed in order for the U.S. refining industry to remain competitive. Moreover, the imposition of either quotas or fees would get the government back in the business, as we had during price controls and allocation, of determining what special, "deserving" groups should be exempted or protected from the fee or quotas and, consequently, what other groups should bear a disproportionate burden.

Q-14. How would we determine an appropriate quota level, and what is your estimate of what an effective quota level is?

A. As stated in response to question 13, the Department opposes the imposition of either quotas or fees.

J Donald Annett
Vice President

Texaco USA

1050 17th Street NW
Suite 500
Washington DC 20036

August 23, 1985

Honorable Don Nickles
Chairman, Subcommittee on Energy
 Regulation and Conservation
Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Senator Nickles:

I am pleased to provide Texaco's response to the questions posed in your July 18, 1985 letter as a follow-up to your Subcommittee's June 4, 1985 hearing.

Respectfully,

J Donald Annett

RESPONSE TO QUESTIONS
FROM
SUBCOMMITTEE ON ENERGY REGULATION

Q1) Please provide the Subcommittee with your assessment as to why 111 refineries shut-down since 1981.

A) Although there appear to be differing opinions on the exact number of refineries that have shut-down since 1981 (i.e. your question shows 111 whereas our statement to your Subcommittee on June 4 indicated 115, and the DOE in recent testimony indicated 140), our assessment is that these refinery closings have tracked the decline in petroleum demand very closely and were brought about because U.S. refinery capacity had expanded beyond sustained demand levels. Many of the refineries built in the late 1970's (and subsequently shut-down) were small and inefficient and constructed to take advantage of the Government's entitlement programs which favored small refiners. The primary cause of the shut-downs to-date has been refining economics. However, the U.S. is rapidly approaching the point where future plant closings will involve modern, efficient facilities which simply cannot competitively survive against below-cost, subsidized sales by foreign government export refineries seeking access to U.S. markets. The future configuration of the U.S. domestic refining industry over the next several years may well be largely determined by the policies of foreign governments.

Q2) In your opinion, have the closings of those 111 refineries affected U.S. consumers in any way?

A) Since the majority of the refinery closings to-date have been small, unsophisticated facilities, the U.S. consumer in our opinion has not yet been impacted. Any future loss of domestic capacity has potentially grave implications to the consumer with a potential shortfall in product availability and threatens the nation's economic well-being and security.

Q3) a) How much refining capacity does the U.S. have?
b) How much refining capacity does the U.S. need?
c) How much of U.S. refining capacity is currently "excess"?
d) Given the current trend in refinery shut-downs, when will the U.S. no longer have excess refining capacity?

A) a) There are differing estimates of current U.S. refining capacity. According to the Energy Information Agency, at the beginning of 1985 the U.S. had slightly under 15.4 million barrels per day (MMBPD) of operable capacity. The Oil and Gas Journal estimated that there was 15.1 MMBPD of operable U.S. refining capacity at the beginning of the year. Operable capacity is defined as capacity that is now operating plus idle capacity that could be returned to service within 90 days. There is a significant amount of reported operable capacity which has been shut-down since the first of the year or has been idle for such an extended period that a serious question exists whether it could ever be operated again without great expenditures and within a reasonable period of time. The Petroleum Industry Research Foundation (PIRINC) has estimated in a recent report entitled Outlook for Light Product Imports Into the United States, that since the turn of the year, approximately 1 MMBPD of additional capacity has been shut-down on a net basis. PIRINC estimates that current capacity is 15 MMBPD. The Department of Energy has reported about 15.6 MMBPD of operable capacity, of which 1.4 MMBPD was classified as idle on January 1, 1985. The PIRINC estimates of 15 MMBPD conforms very closely with our own. Within each "operable" capacity, however, is over 500,000 BPD of idle capacity which would be of little value in covering the incremental demand generated during the first 4-6 weeks of a major supply disruption.

To respond to questions 3. b) c) and d) entails many complex cost/benefit considerations, which must be combined with the balancing of potentially competing U.S. policy objectives and therefore make this a matter which cannot be reduced to a simple formula.

Responsibility for the determination of the capacities required involves a resolution of many factors touching on economic, trade, energy policy and national security issues and appears to lie in many different departments, agencies, and committees in both the Executive and Legislative branches of the U.S. Government.

Attached for your review is a paper which analyzes what we believe are the relevant criteria in making the policy judgment on the minimal level of domestic refining capacity required to meet U.S. energy and national security needs.

Q4) a) In your opinion, at what point will a decline of U.S. refining capacity have a material impact on U.S. energy security?

b) Given the current trends in capacity, when will we reach that point?

A) Several recent studies have indicated that without a shift in U.S. policy, 1,000,000 BPD of existing operating refining capacity in the U.S. is likely to be displaced within the next two years by subsidized foreign product imports. The U.S. must promptly decide from a policy standpoint whether it is indifferent to the loss of such a large segment of its existing domestic refining base. The implications of such a loss are set forth in our answer to Question 3.

Q5) A) Do you believe that foreign countries are subsidizing their refiners as is indicated in the May 1985 ITC study?

B) Do you believe that foreign refiners are using this subsidy to compete unfairly?

C) What, if anything, should the Government do to prevent these subsidies from adversely affecting our petroleum industry? What would be the costs and benefits of such protection?

A) a, b) We have no reason to doubt the ITC findings that unfair pricing and trade practices exist in many energy rich nations particularly those with abundant supplies of crude oil and natural gas.

c) The growing use of two tiered pricing arrangements and other below cost pricing structures by resource rich countries creates a subsidizing of their domestic refiners by providing them natural resource inputs at below market rates. It is urgent that Congress promptly enact trade legislation to provide meaningful remedies against these practices. Insistence that trade be fair as well as free is consistent with long standing principles and is in no way a protectionist policy. Texaco believes that legislation in the nature of the natural resource subsidy provisions and principles contained in S. 1292, introduced by Senators Baucus and Long, is urgently needed.

Q6) In your opinion, what will happen to U.S. refining margins and U.S. refiners when the export refineries under constructions in Persian Gulf countries and elsewhere go into operation?

A) There is an estimated 2.25 MMBPD of new refining capacity planned or under construction which will come on stream in the next several years in several OPEC countries. One million BPD of this new export capacity will be on stream by the end of 1985. Their strategic objective will be to gain access to consumer markets, particularly the U.S. (It should be noted that the locations of these export refineries in the Middle East and North Africa, representing 1.4 MMBPD of capacity, are in areas which were the source of crude supply disruption in the 1970's.)

Studies by two separate consulting groups which looked into the impact of imports of light petroleum products into the United States predicted OPEC's share of the U.S. light product market in 1990 will be at least twice that of current levels. The PIRINC study (referred to earlier) has estimated that as much as 850,000 barrels per day of light product imports could come into the U.S. from these OPEC export refineries. This would displace a minimum of 1 MMBPD of crude running in domestic refineries. A report by the Pace Company Consultants and Engineers, Inc. (PACE) entitled, The Effect of Increasing Petroleum Product Imports on the United States Refining Industry, estimates that even a larger volume of light product imports could come into the United States from these export locations.

It has already been shown that the current volumes of product imports exert significant downward pressure on refinery margins in the United States. In the highly competive petroleum market place, it is the price of the last barrel seeking to enter the market which can determine the overall level of prices. We believe that when these new export refineries come on stream, domestic refineries in an attempt to compete against below cost sales by foreign competition will experience more depressed margins and larger losses in wide-spread instances. This will undoubtedly lend to the shut-down of additional U.S. refinery capacity.

Q7) At what point will the shut-down of U.S. refineries threaten the use of Strategic Petroleum Reserve oil?

A) The purpose of maintaining the SPR is to act as a buffer against a crude oil import disruption. A determination of the minimum required level of domestic refining capacity hinges on U.S. policy objectives with respect to the percentage of normal domestic demand required to be covered in the event of a supply disruption. The U.S. must maintain sufficient domestic refining capacity to utilize maximum SPR withdrawals. However, in addition to adequately covering normal domestic demand for petroleum products of about 16 MMBPD, there remains the policy question of what refining capacity above that level is needed to to meet incremental military demand in times of emergency. Some foreign crude oil (at least from Western Hemisphere sources) should be available even in a period of disruption to supplement domestic production and SPR withdrawal. The issue is whether there will be refining capacity available to process such crude. This matter is more fully analyzed in the attached paper.

Q8) The East - West Center Report, which the Department commissioned, concluded that:

> "If products are suddenly dumped, in a subsidized fashion, into the U.S. market, this could cause closure of efficient, sophisticated refineries that ought to remain open in the long term. While long-term equilibrium may favor the efficient refiner, it is the short term in which firms must remain in business.

> While every effort should be made to avoid interference with the market, the U.S. should be prepared for the fact that trade barriers or abusive subsidization elsewhere might under certain circumstances require government action to protect efficient refiners from short-term bankruptcy."

What is your assessment of that statement?

A) We agree with this assessment. Legislation incorporating the natural resource subsidy provisions recently introduced by Senators Baucus and Long is urgently needed and would provide some protection for the domestic refining industry against unfair, below cost sales by foreign government/refiners. Adoption of such legislation may help avoid the necessity for more direct forms of government intervention in the market place.

Q9) The East - West Center Report also noted that when surplus refining capacity is eliminated, a new kind of security risk could emerge. They stated that "The destruction of refineries in politically unstable areas, through war or terrorism, could cause serious shortages if there is no slack refining capacity elsewhere."

What is your assessment of that statement?

A) We have no reason to disagree with this basic premise.

Q10) Secretary Boggs indicated in his testimony that restricting product imports would lead to the anomalous situation of increasing our dependence on Persian Gulf Oil. He noted that 97 percent of oil product imports come from non-Persian Gulf countries whereas the crude to replace these products would likely come from the Persian Gulf. What is your assessment of that statement?

A) While it is true that currently the majority of petroleum product imports into the United States come from non-Persian Gulf countries, recent analysis by PIRINC and PACE both predicted that when the export refineries under construction come on stream OPEC's share of the U.S. light product market will be at least twice that of current levels by 1990. With the closure of several major refineries in the Caribbean in the last few months and activation of six or more new export refineries in the Persian Gulf, U.S. imports of oil products from the Persian Gulf will sharply rise.

Questions from Senator Warner

Q11) How high would an import fee have to be to make the U.S. refining industry competitive?

A) The U.S. refining industry is presently one of the most technically advanced and sophisticated industries in the world. While the refineries are technologically competitive in the world market, they simply cannot survive against subsidized crude supplied to foreign government-owned export refineries seeking access to U.S. markets. The level of any countervailing duty or fee in these circumstances should relate to the amount of the unfair foreign subsidy.

Q12) Since most of our imports of refined petroleum products are from government subsidized facilities, wouldn't these governments just increase their subsidies to retain their share of the U.S. market?

A) It is hoped that any mechanism adopted to offset such subsidies would discourage governments from further subsidization.

Q13) Is there any way to help our ailing domestic refining industry other than import fees or quotas?

A) The November 28, 1984 study by the staff of the Joint Committee on Taxation shows that the petroleum industries' rate of income tax payments for 1980-83 was 28 percent higher than the average of other industries. Taking into account the so-called "windfall profit tax" which is an excise tax on oil and gas production, the petroleum industry had the highest tax rate of the 30 major industries studied.

Texaco supports tax reform to achieve fairness and foster growth, but without sacrificing national security. Substantial modifications will have to be made in the President's recent tax reform proposal to achieve these objectives and to provide the necessary incentives to keep the domestic petroleum industry competitive against the rising tide of petroleum product imports.

Both the elimination of the investment tax credit/accelerated cost recovery and the recapture of past cost recovery reductions will have an adverse impact on the cash flow of the petroleum industry and its ability to finance new investment. In addition, the elimination of the investment tax credit/accelerated cost recovery can determine whether an investment project is economically viable. To the extent such projects are in the exploration and producing areas, the resulting loss of production will have adverse national security implications. To the extent such projects are needed to maintain the competitiveness of existing domestic refineries, progressively more of our domestic consumption of petroleum products will be satisfied by foreign refineries -- again with adverse national security implications.

Secondly, Congress' determination of how to finance the certain-to-be expanded Superfund program may add further to a serious competitive disadvantage already facing the domestic refining industry.

The present means of funding Superfund is not fair. Right now, the bulk of Superfund comes from a feedstock tax on crude oil and imported petroleum products, and from a tax on a list of 42 chemicals. However, despite the large funding contribution by the oil industry, Superfund is not utilized to clean up oil spills - it actually excludes them.

Abandoned waste sites are mostly the result of practices in non-petroleum industries. Yet the oil industry funds 15% of Superfund, while accounting for only 3% of the hazardous wastes in this country.

Since the creation of these waste sites has been the result of activities in the entire spectrum of U.S. industry (as well as by federal, state, and local governments) this national, societal problem should logically be funded out of general revenues. If Congress is reluctant to use this approach, it should enact an environmental excise tax that would apply equitably to all manufacturers. Recently the Senate Finance Committee approved almost unanimously the "Superfund Excise Tax" which incorporates this broad-based approach.

Q14) Would you prefer a quota or an import fee?

A) The appropriate remedy is a function of the urgently needed policy determination of what is the minimum level of U.S. refining capacity required to insure economic and national security. How close the U.S. is to reaching such a minimum level will determine the timing and severity of the remedial measures required.

Q15) How would we determine an appropriate quota level, and what is your estimate of what an effective quota level is?

A) See our answer to Question 14.

PETROLEUM PRODUCT IMPORTS

SUGGESTED CRITERIA TO DETERMINE MINIMUM LEVEL OF DOMESTIC REFINING CAPACITY REQUIRED TO MEET U.S. ENERGY AND NATIONAL SECURITY NEEDS

Increasing levels of petroleum product imports, combined with the unprecedented amount of U.S. refining capacity closed since 1981, have raised the question as to what is the minimum level of domestic refining capacity required to meet U.S. energy and national security needs. No consensus exists at present as to what criteria should be applied in making this determination. The many complex cost/benefit considerations involved, combined with the balancing of potentially competing policy objectives, make this a matter which cannot be reduced to a simple formula. Set forth below is an analysis and discussion of a number of matters which would appear relevant in identifying the appropriate criteria to be utilized in making this difficult judgment.

DESIRED POLICY OBJECTIVES

A determination of the minimum required level of domestic refining capacity initially turns on U.S. policy objectives with respect to the percentage of normal domestic demand desired to be covered in the event of a supply disruption. The 1973-74 and 1979 cutoffs of petroleum imports to the U.S. resulted in economic and political shocks which, as a matter of policy, the country may desire to avoid or significantly minimize in the future. The strong conservation measures adopted since 1979, however, make the demand constraint opportunities available without injury to the economy much less than in prior periods. The creation of the SPR is a reflection of these policy considerations and the U.S. without question must maintain sufficient domestic refining capacity to utilize maximum SPR withdrawals.

In addition to covering adequately domestic demand, there remains the policy question of what refining capacity above the level to satisfy the approximately 16 MMBPD of civilian demand will be required to meet incremental military needs in time of emergency. Dr. Fred C. Ikle, Under Secretary of Defense for Policy, testified in Senate Committee hearings on June 21, 1985 that DOD's average daily consumption of approximately 500,000 BPD "could increase as much as three or four times during an emergency period." He explained that "During the early stages of an emergency requiring mobilization of military forces, our petroleum consumption would increase quickly." A major military mobilization could also increase normal civilian demand as much as 2 MMBPD, as factories operate on a round-the-clock basis to meet the military's needs.

A related policy consideration is the extent to which Europe's refined product requirements might have to be supplemented from U.S. sources in the event of military action in Europe. Approximately 50 percent of Europe's light petroleum product imports come from Russia and Eastern bloc nations and, therefore, create a vulnerability to political or military considerations.

IMPACT OF IMPORTS ON REGIONAL MARKETS AND SPECIFIC PRODUCT REQUIREMENTS

Determination of a prudent level for product imports involves more than simply comparing total imports to total U.S. demand. Although gasoline imports and identified gasoline blending stocks currently represent 8 percent of total U.S. gasoline demand, they represent over 15 percent of East Coast (PAD I) demand. Such level of imports is more than enough to influence the price structure of the market and create a serious threat to the region in the event alternative supplies are not available in a period of disruption.

Similarly, it is important to recognize that the U.S. has adopted product quality and environmental specifications regarding lead levels, sulfur content, etc. which prevent refined products from being completely interchangeable. A cut-off of supplies from an export refinery making products satisfying U.S. quality specifications cannot be automatically replaced with supplies from another export refinery. This is another demonstration of the vulnerability arising from the shift by the U.S. to increasing volumes of light product imports.

An analysis comparing total product imports to total refining capacity can also be misleading by failing to recognize that the various refinery units do not all make the same slate of refined products. Some refineries produce mostly asphalt; others were designed to maximize middle distillate production and others gasoline. The relevant comparison in determining the adequacy of current refining capacity should be on a product-by-product basis in terms of the adequacy of existing capacity to cover current and projected demand.

DETERMINATION OF DOMESTIC REFINING CAPACITY ACTUALLY AVAILABLE

Various categories of refining capacity are reported from time to time. The most relevant is "operable" refining capacity which includes those units which are actively processing crude oil, together with idled refining capacity which can be operating within 90 days. The best estimate of current U.S. "operable" refining capacity is approximately 15 MMBPD. Included within this amount, however, is approximately 600,000 BPD which is currently idle and, with additional passage of time, may be beyond recommissioning. Accordingly, U.S. refineries currently are capable of average daily runs of approximately 14.4 MMBPD as compared to average daily peacetime demand of almost 16 MMBPD including NGL'S.

Recent studies have indicated that as much as 1 MMBPD of existing "operable" refining capacity may be at risk during the next two to three years as a result of competition from product imports from the new OPEC export refineries. Therefore, a judgment must be made as to whether U.S. energy security and national security would be adequately protected if U.S. "operable" refining capacity were to drop to a level of about 14.0 MMBPD with as much as 600 MBPD of such capacity "idle" and not available to help cover any sudden short-term increase in demand. During the first 4-6 weeks of a major military supply disruption it is estimated that as much as 3MMBPD of incremental product demand will be generated by additional military requirements and incremental civilian demand associated with domestic mobilization activity in support of the defense build up. This was the experience in World War II and Korea. This additional demand does not include any short-term surge created by the fear of shortage which led to massive tank topping and attempts to build inventory during the 1973-74 and 1979 disruptions. "Idle" operable refining capacity in most instances would require 30 days or more for maintenance and "de-mothballing" before a return to running. Therefore, it is of limited value in dealing with the supply/price problems which a disruption creates. Absent the capability to deal with a sudden surge in demand of this nature a strong upward movement in price levels could occur. This would create strong pressure for government intervention which past experience has shown would be counterproductive in re-establishing supply/demand equalibrium. The SPR was created to help deal with this type of problem. Yet without adequate refining capacity to process crude supplies which are available during a period of disruption, the benefits of the SPR will be lost.

During a major military disruption the U.S. could be confronted with a short-term demand of at least 19 MMBPD to be satisfied by 14.4 MMBPD of current operating refining capacity plus 1.7 MMBPD of NGL's. The balance would have to be covered by product imports.

NATIONAL SECURITY CONSIDERATIONS

Product imports into the U.S. currently average almost 2 MMBPD. The policy question which requires prompt resolution is whether the U.S. is indifferent to the projected loss over the next 2-3 years of an additional 1 MMBPD of domestic refining capacity through competition from subsidized product imports. Absent a policy shift, the U.S. can anticipate product import levels rising to almost 3 MMBPD by the end of 1987. These levels would have to be further increased to cover additional demands created by any military related supply disruption.

The acceptability of as much as 3 MMBPD of product imports would depend, inter alia, upon (1) the security of the geographic sources of such supplies; (2) the different product composition of such imports and the capability for substitution of such products with other domestic energy supplies; (3) the nature of the ownership (private firm or government) of the export refineries upon which the U.S. has placed its product supply dependence; and (4) the likely capability of the product importer (traders, marketers and blenders vs. refiners) to arrange for an alternative supply source in the event of an international disruption. These matters are discussed more fully below:

1. Long-Haul vs. Short-Haul Sources Of Supply

An increasing percentage of petroleum product imports come from long-haul sources as compared to the traditional Caribbean short-haul sources of the 1970's. Fifty percent (50%) of the gasoline and the identified gasoline blending stocks imported in 1984 came from Brazil, China, Romania, the UAE and Western Europe. The additional imports forecast over the next two years from OPEC export refineries will significantly increase the United States' dependence on long-haul sources. These supplies will be much more vulnerable to military and possible terrorist disruption than the short-haul product imports on which the U.S. relied in the 1970's. Time/distance considerations could also be significant during a period of international supply disruption. Shipping time from the Carribbean is a few days compared to 45 days from the Persian Gulf.

2. Ability To Substitute Other Domestic Energy Sources For Product Imports During Periods Of Disruption

In 1972, the U.S. imported 1,742,000 BPD of residual fuel oil representing 69 percent of total product imports. This amount had declined to 674,000 BPD in 1984 and represented only 34 percent of total product imports. Residual fuel oil, principally consumed by electric utilities and large industrial users, can be substituted readily with coal or natural gas in the event of curtailment. In contrast, today's product imports are predominantly the lighter transportation fuels which are not capable of subsitution by other domestic energy sources. A supply disruption in light product imports would have a much greater impact on economic and national security considerations than was the case with residual fuel oil in the 1970's.

3. Refinery Ownership By Private Firms vs. Foreign Governments

In 1975 only 4 percent of U.S. light product imports were supplied by government-owned refineries. By 1984 the amount had risen to 36 percent. Forecast deliveries from new export refineries into the U.S. over the next two or three years could increase dependence on foreign government-owned export refineries to as much as 70 percent. Governments have a much broader agenda than private commercial firms in establishing price levels and exercising available leverage during a period of tight supplies. Foreign governments can also be expected to weigh political considerations with respect to supplying products to U.S. military forces in the event of any East-West confrontation. During the 1973-74 Arab embargo, offshore refineries supplying U.S. military forces were primarily owned by U.S. companies. This is becoming increasingly less the case.

4. The Changing Character of Entities Importing Products Into The U.S.

In 1978 the major international oil companies imported 25 percent of the total light products and unfinished oils imported into the U.S. Domestic refiners and traders, marketers and blenders imported 60 percent and 15 percent of these products respectively. In 1984, the major international oil companies imported only 8 percent of the total of these products brought into the U.S. and the domestic refiners' share had dropped to a level of 41 percent. Traders, marketers and blenders imported 490,000 BPD of total light products and unfinished oils intn the U.S. in 1984 representing 51 percent of total light product imports. Whether this newly dominant type of importer will have the capability of arranging for alternative sources of supply in the event of an international disruption remains undemonstrated.

ADDITIONAL FACTORS TO BE USED IN DETERMINING MINIMUM DOMESTIC REFINING CAPACITY

1. Ability To Refine Secure Sources of Crude

A formula based on the amount of current U.S. crude oil production (9 MMBPD) plus maximum SPR drawdown capability (3-3.5 MMBPD) to determine a minimum U.S. refinery capacity is much too simplistic. Such a formula would provide a supply of only 12.5 MMBPD of refined products which, combined with approximately 1.5 MMBPD of domestic natural gas liquids, would leave a supply shortfall of 1.5-2.0 MMBPD from normal civilian demand. It is highly unlikely that an international supply disruption would result in a curtailment of all crude oil imports, but the above formula would provide no increment of domestic refining capacity to process such crude imports as may be available from the Western Hemisphere and other sources. To the extent national policy dictates that some percentage of incremental military mobilization demand be covered by domestic refining capacity, the above formula, unless appropriately adjusted, would further understate U.S. minimum refining requirements.

2. "Cushion" Capacity As A Margin For Error

Once refineries have been permanently closed, the costs of maintenance and rehabilitation make it extremely difficult to ever resume operations. Accordingly, consideration should be given as to whether some small increment of capacity should be retained for policy planning purposes as a "cushion" in the event of forecast error. The complexities involved in making accurate petroleum supply/demand forecasts combined with the poor track record of prior estimates suggest it may be prudent to err on the conservative side in determining a minimum capacity level. Moreover, the upward pressure on price resulting from a precisely balanced supply/demand relationship may make the existence of such a "cushion" a benefit from a consumer standpoint. Seasonal swings in demand combined with unanticipated operating upsets, requiring unscheduled downtimes, also point to the desirability of maintaining a small increment of "cushion" capacity.

SUMMARY

The above discussion identifies a number of relevant factors to be considered in reaching a judgment on the minimum level of U.S. refining capacity to meet energy requirements and national security needs. In the final analysis, an informed judgment must be made, taking all of the above factors into consideration with appropriate weighting. No single formula would seem to be a sufficiently reliable indicator.

U.S. light product imports will be reaching levels within the next two years which are comparable to the levels reached during the periods in the 1970's when supply disruptions occurred.

The critical factors, as noted above, are the changing mix of product imports to the lighter transportation fuels combined with the shift to long-haul sources operated by foreign governments. These relationships create a much greater vulnerability from product import dependence than was the case in the 1970's.

Also significant is that further declines in domestic refining capacity will result not from normal competitive market forces but to a greater extent from raw materials and other subsidies provided by foreign governments to their export refineries as found in the recent study by the International Trade Commission. As domestic refining capacity continues to rapidly trend downward toward minimum levels, some government action at an early date is clearly indicated to prevent such unfair competition. This would help ensure that the U.S. does not unknowingly drift below minimum prudent levels and additionaly provide greater flexibility in the policy options available to protect vital energy and national security interests.

8/20/85(R2)
(grg 159)

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LEONARD P. STEUART, II
PRESIDENT

August 23, 1985

The Honorable Don Nickles
Chairman
Subcommittee on Energy Regulation
  and Conservation
Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Senator Nickles:

The enclosed responses are submitted to the follow-up questions you posed on July 13, 1985. As you know, I appeared before the Subcommittee on June 4 as Chairman of the Coalition of Petroleum Product Marketers to present the views of the independent marketing segment of the industry. It is from that perspective that I respond to your questions.

Please call me if you would like any further views of the Coalition on this subject.

Sincerely,

Leonard P. Steuart, II
Leonard P. Steuart, II

Enclosure

cc: Senator J. Bennett Johnston

QUESTIONS FROM THE SUBCOMMITTEE ON ENERGY REGULATIONS AND CONSERVATION

1. Please provide the Subcommittee with your assessment as to why 111 refineries shut down since 1981.

The Coalition testimony sets forth the reasons why 111 refineries--half of which have capacity of 10,000 barrels per calendar day ("B/CD") or less*/--have closed since 1981. The two critical reasons are: the end of petroleum price controls on January 28, 1981 and the decline in petroleum product demand since 1979. There seems to be no correlation between the closing of domestic refineries and the levels of petroleum product imports or gasoline imports.

2. In your opinion, have the closing of those 111 refineries affected U.S. consumers in any way?

The closing of these refineries has not affected U.S. consumers adversely in any way. The real price of gasoline and fuel oil has declined during this period, and no consumers have experienced any shortage of products.

3a. How much refining capacity does the U.S. have?

According to Department of Energy data, the U.S. had 15,659,000 barrels per day of operable distillation capacity on January 1, 1985. Operable capacity, rather than operating capacity, is the appropriate measure. Operable capacity includes capacity that has shut down but can be reopened within 30 to 90 days, depending upon whether the facility is simply closed or under active repair.

3b. How much refining capacity does the U.S. need?

This question is unanswerable without agreement on what is meant by "need." In our view, the U.S. "needs enough capacity to refine its domestic crude oil production, plus any crude oil that is drawn down from the Strategic Petroleum Reserve ("SPR"). Domestic production is approximately 8.9 million b/d and SPR drawdown could be 2.75 million b/d, for a total of 11.65 million b/d. Assuming refineries could be operated at 95 percent, the level achieved throughout the late 1960's, total capacity

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*/ Capacity	No. of Refineries	Percentage of Total
Over 100,000 B/CD	5	4.5%
30,001 - 100,000 B/CD	13	11.6%
10,001 - 30,000 B/CD	38	33.9%
10,000 or less B/CD	56	50.0%
	112	100.0%

Source: U.S. Department of Energy, Energy Information Administration, Petroleum Supply Annual 1984, Volume I (1985).

"needed" is about 12.25 million b/d. Such capacity should include refineries in the U.S. Virgin Islands and Puerto Rico, which are traditionally considered U.S. refiners and can refine U.S. crude oil.

3c. How much of U.S. refining capacity is currently "excess?"

The Coalition's testimony addresses this point. At the very least, the U.S. has approximately 2.5 million b/d in excess refining capacity. This would be the level of unused but operable capacity if all product imports were embargoed and the shortfall had to be refined in U.S. facilities. Such a situation is practically inconceivable, however, excess capacity is more than 2.5 million b/d. (Note: This excess does not include Virgin Island and Puerto Rican capacity.)

3d. Given the current trend in refinery shut downs, when will the U.S. no longer have excess refining capacity?

There is no reason to believe that "current trends" will continue. Recent history of the oil industry demonstrates that rapid and unexpected changes can and do occur.

4a. In your opinion, at what point will a decline of U.S. refinery capacity have a material impact on U.S. energy security?

See answer to question 3b. There may be a separate security need for capacity to refine particular products important to national security, such as residual fuel oil.

4b. Given the currect trends in capacity, when will we reach that point?

See answer to 3d. The Coalition sees no set of circumstances under which the refining capacity in the U.S. will have a negative impact on national security.

5a. Do you believe that foreign countries are subsidizing their refiners as indicated in the May 1985 ITC study?

The Coalition has no basis on which to believe that foreign countries are subsidizing their refiners.

5b. Do you believe that foreign refiners are using this subsidy to compete unfairly?

No.

5c. What, if anything, should the government do to prevent these subsidies from adversely affecting our petroleum industry? What would be the costs and benefits of such protection?

If subsidies are being granted, our existing trade laws should be enforced to prevent dumping or illegal subsidies.

6. In your opinion, what will happen to U.S. refining margins and U.S. refiners when the export refineries under construction in Persian Gulf countries and elsewhere go into operation?

The Coalition does not believe that U.S. refinery margins will be affected significantly when refineries in the Persian Gulf go into operation. There is now a large surplus of worldwide refining capacity that may exceed 10 million b/d. Some of this excess may be closed in response to Persian Gulf refineries, but the opening of Persian Gulf refineries will not materially increase the surplus of world refining capacity.

7. At what point will the shut down of U.S. refineries threaten the use of Strategic Petroleum Reserve oil?

See answer to Question 3b. The premise of the question assumes that the SPR must only be crude oil. If national security is threatened by imports of any petroleum product, existing law permits storage of that product in the SPR. Therefore, the SPR need not be threatened at all by shutdowns of U.S. refining capacity; if permanent shut-downs threaten a totally crude oil SPR, adjustments should be made to provide for a mix of crude oil and strategically significant products in the SPR.

8. The East-West Center report, which the Department commissioned, concluded that:

> "If products are suddenly dumped, in a subsidized fashion, into the U.S. market, this could cause closure of a number of efficient, sophisticated refineries that ought to remain open in the long term. While long-term equilibrium may favor the efficient refiner, it is the short term in which firms must remain in business. While every effort should be made to avoid interference with the

> market, the U.S. should be prepared for the fact that trade barriers or abusive subsidization elsewhere might under certain circumstances require government action to protect efficient refiners from short-term bankruptcy."

What is your assessment of that statement?

If products are "dumped, in a subsidized fashion" that threatens significant injury to the domestic industry, existing U.S. trade laws could be invoked to place anti-dumping margins or countervailing duties on the unfairly traded imports. This can be done promptly, under existing law, and has been done in many other industries to prevent material injury.

9. The East West Center report also noted that when surplus refining capacity is eliminated, a new kind of security risk could emerge. They stated that "The destruction of refineries in politically unstable areas, through war or terrorism, could cause serious shortages if there is no slack refining capacity elsewhere."

What is your assessment of this statement?

There is no indication that worldwide surplus refining capacity will be eliminated in the foreseeable future. Therefore, the statement, while true, is purely hypothetical and is intended as such. Moreover, the United States is not heavily dependent upon refined petroleum products from abroad. The limited volume of imports is from diverse sources; recently, in fact, most comes from North and South America, the Caribbean and Western Europe -- sources usually considered relatively stable politically and free from terrorist activity.

10. Secretary Boggs indicated in his testimony that restricting product imports would lead to the anomalous situation of increasing our dependence on Persian Gulf oil. He noted that 97 percent of our oil product imports come from non-Persian Gulf countries whereas the crude to replace these products would likely come from the Persian Gulf. What is your assessment of that statement?

Secretary Boggs is correct. The Coalition's testimony specifically points out that almost all petroleum product imports are from non-Persian Gulf sources. Indeed, excluding Venezuela, only 0.8 percent of product imports in 1984 were of OPEC origin. Secretary Boggs is also correct that crude oil imports could increase if product imports were restricted; however, the precise source of those marginal crude oil imports is difficult to predict accurately.

Questions from Senator Warner

11. How high would an import fee have to be to make the U.S. refining industry competitive?

The U.S. refining is competitive without any import fee. It currently supplies and controls approximately 94 percent of the U.S. product market.

12. Since most of our imports of refined petroleum products are from government subsidized facilities, wouldn't these governments just increase their subsidies to retain their share of the U.S. market?

There is no evidence whatsoever that most of our imports of petroleum products are from government subsidized facilities.

13. Is there any way to help our ailing domestic refining industry other than import fees or quotas?

The Domestic refining industry is not ailing. Second quarter 1985 profits are significantly higher for almost all refiners, when one time items are excluded. The recent changes in the domestic refining industry are natural and necessary adjustments, a return to more normal operations, after the market distributions created by a decade of government controls. Import fees or quotas would reintroduce these distortions with a new set of government controls.

14. Would you prefer a quota or an import fee?

Neither. They have essentially the same result on consumers and independent marketers.

15. How would we determine an appropriate quota level, and what is your estimate of what an effective quota is?

See answer to Question 14.

Ashland

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JOHN R. HALL
Chairman and
Chief Executive Officer
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August 14, 1985

Senator Don Nickles
Chairman, Subcommittee on Energy
Regulation and Conservation
United States Senate
Dirksen Senate Office Building
Room 358
Washington, D.C. 20510

Dear Senator Nickles:

Enclosed are Ashland Oil's responses to the questions you raised in your letter of July 18, 1985. If we can provide any additional information on the impact of imported petroleum products on the domestic petroleum industry, please let me know.

Cordially yours,

John R Hall

dc

Enclosure

QUESTION 1

Why have 111 refineries shut down since 1981?

Most were shut down as a result of a drastic decline in demand for petroleum products which began in 1979, coupled with the removal of price controls in early 1981. However, some others were forced to shut down due to a rapid increase in gasoline and light product imports since 1981 -- an increase which is continuing despite the underutilization of remaining operable capacity in the United States.

A brief review of historical trends highlights the refining capacity situation today. For many years prior to 1973, the U.S. government limited crude oil imports through a quota system. Domestic crude prices were kept higher than foreign, and imports of residual fuel produced largely in the Caribbean from cheap foreign crudes was encouraged. United States refiners constructed highly complex units, geared to producing higher margin gasoline and distillates most in demand in this country, while minimizing residual fuel production. Domestic refining capacity grew as gasoline demand grew. At the same time, the number of refineries declined due to greater efficiencies of larger plants.

In late 1973, the Arab Embargo changed these conditions. Price controls placed on domestic crude oil now caused it to be cheaper than foreign, and domestic refining (albeit with margins fixed by controls) became attractive even to produce residual fuels. Small topping plants proliferated to take advantage of controls, and the number of domestic refineries grew. Capacity and the number of operating refineries peaked in 1981, when conditions were radically altered by President Reagan's decontrol policy, which eliminated the cost differential between domestic and foreign crude oils.

Even before the President's decontrol, demand for petroleum products in the U.S. began to decline, prompted by the huge OPEC price increase in 1979 and the resulting worldwide economic slump. Domestic product demand fell from a peak of 18.8 million B/D in 1978 to a low 15.2 million B/D in 1983. That 3.6 million B/D drop in demand shut down most of the small inefficient refineries built or restarted in the late '70's.

Domestic demand turned around again in 1983-84 with the economic recovery, and increased to 15.7 million B/D in 1984. However, domestic refinery capacity continued to shut down, due in large measure to a rapid increase in light product imports. Gasoline imports, for example, increased by about 400M B/D in the period 1981-84, and are up another 30% so far in 1985. Since gasoline represents about 50% of a U.S. refiner's yield, those increases effectively shut down 800M B/D of domestic capacity that would otherwise have remained on stream.

QUESTION 2

Has the closing of 111 refineries affected U.S. consumers in any way?

The refinery closings obviously inflicted trauma on the communities where they were located, creating loss of jobs and related economic woes. They have also worsened the nation's balance of payments, since products are higher priced than crude oil. Other than that, the consumer has probably enjoyed a short-term benefit in that for the most part the higher cost plants have been the ones closed. Also, product imports from nations which are subsidizing their refinery output has put downward pressure on domestic product prices.

Of course, in the longer run the consumer will suffer from a growing dependence on foreign source refined product, and a possible cut-off in event of future political unrest.

QUESTION 3

a) How much refining capacity does the U.S. have?

Surprisingly, the answer to this question is perhaps the most difficult on which to get a consensus. The response depends upon an understanding of the term "capacity", and a perhaps more relevant term --"refining capability". The two terms are definitely not the same.

The Energy Information Agency (EIA) compiles annual data on "refinery capacity", aggregated from forms which refiners file with them. The EIA reports that on 1/1/85, the U.S. had an "operable capacity" of 15.6 million B/D, but an "operating capacity" of only 14.3 million B/D. The difference of 1.3 million B/D is defined as refining capacity which was shut down on the survey date, but claimed to be capable of starting up within 30 days. There are many reasons why refiners like to claim their plants are "operable", when in reality there is little likelihood that much of this capacity could restart without sizable expenditures and extensive rehabilitation time. EIA acknowledges the limitations in their data, and accepts that "operating capacity" is the truer figure. Our own assessment of announced changes since 1/1/85 indicate that "operating capacity" today is down to about 14.1 million B/D.

Even this figure does not give one the actual "refining capability" of domestic capacity, which in the final review is the information required. An analysis of reported capacity and refinery throughputs for the last thirty-five years shows that the industry has been able to sustain a maximum utilization rate of only about 91% of its reported "operating capacity". In other words, refining upsets, pipeline upsets, fires, turnarounds, etc. all combine to limit maximum throughput to 91% of rated capacity over time. Thus, for any sustained period, the U.S. refining capability today is no more than 91% of 14.1 million B/D, or 12.8 million B/D. Recent throughputs have been only slightly below the latter figure, indicating little surge capability in the capacity still operating.

Furthermore, the lead phasedown in gasoline will probably result in a significant reduction in the 91% utilization factor, reducing refining capability still further. The tight lead rules will leave little margin for error, and octane capacity is tight.

b) How much refining capacity does the U.S. need?

Since the Strategic Petroleum Reserve (SPR) was constructed and filled with the intention of protecting the U.S. economy during a supply disruption, domestic refining "capability" should at least be sufficient to utilize SPR drawdown at maximum rate. The design drawdown rate has been estalished by DOE at 4.5 million B/D, which is just slightly less than today's combined imports of crude oil and products. Thus, at a minimum, U.S. refining capability should be adequate to handle normal domestic production (about 8.7 million B/D) plus SPR maximum drawdown (4.5 million B/D), or 13.2 million B/D. At the 91% utilization rate mentioned in the response to Question 3a, this implies maintenance of an "operating capacity" of 14.5 million B/D.

c) How much U.S. refining capacity is currently "excess"?

Present figures indicate there is no "excess" capacity. We have about 14.1 million B/D of operating capacity at present, and need 14.5 million B/D to assure full utilization of the SPR in an emergency. Recently, U.S. refineries have been operating at around 90.5% of "operating" capacity, which is close to the industry's historic sustainable maximum. Even so, further growth in imports can still shut down more domestic capacity.

d) When will the U.S. no longer have excess capacity?

As explained in 3(c), we do not have excess capacity today. There may be further erosion in our already short capacity brought about by the new lead in gasoline regulations which become effective 1/1/86. To justify investments necessary to meet those requirements, refiners need an indication that their expenditures will not be negated by further imports. In other words, many will not make the investments unless the government sends some signal that it will not allow domestic capacity to deteriorate further due to pressure of imports.

As seen by domestic refiners, the signals are quite the opposite. Competitors in Europe can use TEL -- the least expensive octane booster -- in their gasoline pools for local consumption. They can export their high octane components to the U.S. for use in unleaded or low-lead gasolines, and merely "lead up" the remainder of their pool for sales in the host nation. The low-lead program is thus seen as a boon to foreign refiners competing in the U.S. markets.

QUESTION 4

a) When will a decline of U.S. refinery capacity have a material impact on U.S. energy security?

Once again, an impact on energy security is created when domestic refining capability falls below the crude supplies we can call upon even in the direst of emergencies -- domestic production plus SPR drawdown.

b) When will we reach that point?

As stated earlier, in our opinion we are already there. Perhaps we should add one caveat here, however. Present drawdown capability of the SPR is estimated by NPC at only 2.5 million B/D. An emergency occurring today which cuts off all imports would require only 11.2 million B/D of refining capability (12.3 million B/D of capacity using the 91% factor) which is less than our present capability. However, if domestic refining capacity is allowed to deteriorate to that level, there can be no assurances that it will ever again be expanded to the 14.5 million B/D necessary when the SPR facilities are completed.

Since an emergency today could also result in a total petroleum shortfall of more than 20% (demand is now around 15.5 million B/D), it should be incumbent upon the

Congress to urge completion of the SPR drawdown capability. We need not remind you of the devastating effect a shortfall of much less magnitude has had on our economy in the past.

QUESTION 5

a) Are foreign countries subsidizing their refiners?

From every indication, the answer is yes.

Subsidies can assume many different forms. Some countries grant tax holidays, afford free government lands, or guarantee low-priced fuels to encourage refinery construction. Subsidies do not need to be in the form of below-market raw materials. Over 50% of the refineries outside the U.S. today have some sort of host-government ownership, offering plenty of opportunity for "hidden subsidies". With the glut of crude in the world today, many producing nations have shown a willingness to move their crude oil through "counter trades", barter deals, and processing arrangements at prices well below their "official selling prices", in order to increase volume. Given these circumstances, we are assured that other nations do indeed subsidize their refineries to varying degrees.

b) Are foreign refiners using subsidies to compete unfairly?

It is in the host nations' best interest to see that their refineries remain in operation. With the wide disparity between their crude oil "costs" and "official selling price," they have a great latitude to assure that their refinery output is marketable, especially in a huge, unrestricted market such as offered by the United States. One must conclude that such practices result in "unfair" competition.

c) What should the government do to prevent these subsidies? What are the costs and benefits?

In our opinion, it is beyond the U.S. government's capabilities to "prevent" subsidies. They will always be a fact so long as governments are involved in the oil business. In other words, there will never be a truly "free-market" in petroleum.

The government does have several alternatives to respond to subsidies. For example, the government can declare that our national security dictates a certain level of domestic refining capacity, commensurate with the SPR. A portion of the domestic market could thus be set aside to be met solely by domestic competition, guaranteeing adequate domestic capacity. Any extra requirements would be met by imports, with foreign refineries bidding for the right to fill those requirements. In other words, a finite quota for product imports could be established, and that quota would be auctioned off by the government. Competing foreign nations which are subsidizing their plants must win the periodic auctions in order to enter the U.S. market. Foreign subsidies are encouraged, with their values redounding to the U.S. government.

There would be some cost to consumers in that the competition for domestic markets by domestic refiners should take place at a slightly elevated price. On the other hand, the government will reap the rewards from the auction.

QUESTION 6

What will happen to U.S. refining margins and U.S. refiners when the export refineries under construction in Persian Gulf countries and elsewhere go into operation?

From a global standpoint, any new refineries coming on stream in a market already glutted with excess refining capacity will put added pressure on existing plants, especially when the new plants can be subsidized with low-priced feedstocks. It's safe to say that the output from these new refineries will ultimately find a home, and that logical home is the largest and most open in the world -- the United States. As a result, refining margins in the U.S. are bound to be reduced, and more domestic capacity shut down.

One should not be misled either by the reported "origin" of products imported. Often producing countries have refining processing deals elsewhere. Likewise, a European nation could import Mid East light products, while at the same time export similar products to the U.S.

Perhaps it should be noted here that new Persian Gulf refineries do not offer the only threat to the domestic refining industry. European plants, for instance, are operating at levels which are in some cases below breakeven. Many are kept open only because of the host country's insistence. Those plants too can be and probably are subsidized to some extent, and tend to have lower operating costs than their American counterparts due to different environmental considerations. Likewise, those plants are still permitted to use large concentrations of tetra-ethyl lead in their gasoline output to meet octane requirements. When the EPA mandated lead levels in the U.S. are reduced to 0.1 g/g in 1986, U.S. plants will have to produce all their gasoline at this level. European competitors, on the other hand, can run incremental crude, and produce only a small fraction of their gasoline output at lead levels adequate to penetrate the U.S. market. Because they can "lead up" the remainder for their domestic markets, their cost per octane-barrel is far lower than in the U.S.

In short, U.S. policy has greatly handicapped domestic refiners viz a viz their international competition. Gasoline and other light product imports into the U.S. might well continue to grow rapidly even with no apparent increase in direct imports from the Middle East.

QUESTION 7

At what point will the shut down of U.S. refineries threaten the use of Strategic Petroleum Reserve oil?

This question has already been addressed adequately in Questions 3 and 4. The reduced level of domestic capacity already threatens the use of SPR oil at design rates.

QUESTION 8

What is our assessment of East-West Center Report quote?

We agree with the statement completely. Many efficient refiners were indeed in bankruptcy due to conditions that existed in the last two years. Indeed, in at least 7 of the last 10 quarters, most domestic refiners lost money in their operations. During much of that time, products were being imported at prices below crude costs. No refiner, no matter how efficient his plant, can long compete under those conditions.

It is true that refining margins have improved in the last six months, due to a number of factors. This may well be a temporary aberration, for after reaching a peak in May, margins are again in a decline. The potential for more negative margins brought about by excessive imports is definitely still present.

QUESTION 9

What is our assessment of second East-West Center statement?

Here again, we agree completely with the East-West prediction. Some argue that the geographic dispersion of foreign plants reduces the gravity of any increased dependence on foreign plants. In our opinion, that argument is folly. We can not predict the nature of a supply interruption, nor its cause and duration. Export refineries are normally situated in coastal areas, where they are vulnerable to attack by seagoing vessels. Thus, a dependency on foreign refineries appears far more hazardous than a dependency on crude.

Any argument over the relative merits of a dependency on products versus a dependency on crude is specious at best, and avoids a basic truism. The SPR gives us a hedge already against the loss of **crude** imports. We have **no** hedge against a loss of product imports. A dependency on products effectively negates the SPR as our national insurance policy.

QUESTION 10

What is our assessment of Secretary Boggs' Statement in his testimony?

Unfortunately, Secretary Boggs is apparently guilty of looking only at the tree, and missing the forest. Whether the U.S. imports crude oil or product will not make one iota of difference in our ultimate dependence upon Persian Gulf oil (except of course that SPR gives us some protection if imports are crude). While it may be true that 97 percent of our product imports comes from non-Persian Gulf countries, one must look behind that fact to where the crude oil to produce those products came from originally. Because of its pricing policies, OPEC has become the "supplier of last resort" for the rest of the consuming world. In the final analysis, all consuming nations are essentially dependent upon OPEC for its marginal oil -- i.e. that last bit of oil needed -the U.S. no more or no less than any other.

Interposing a refinery located in an intermediate nation -- even a friendly one -- between the OPEC supply of crude and the U.S. consumer, does not enhance our security of supply. If OPEC, or any group of Persian Gulf nations, sought to impose a selective embargo upon the U.S., you can rest assured they would cut off supplies to any refiner which proposed to ship products made from that crude to the U.S.

QUESTION 11

How high would an import fee have to be to make the U.S. refining industry competitive?

This question, and the next, go to the heart of the problem with fees and tariffs, i.e. what is the proper level to accomplish just what is sought, and no more. The question implies that domestic prices might be expected to rise by the level of an import fee, which is not necessarily the case.

An import fee might well be set at a level which would offset the environmental and other special added costs imposed upon domestic refiners by government policy. However, this wouldn't address the foreign subsidy issue. Indeed, the amount and type of subsidy varies greatly from country to country, and is not readily quantifiable where the country owns the refiners in question.

Perhaps a better way to look at the problem is to determine what type fee might be most readily defensible. We feel that one which merely escalated the present duty of 1¼¢/gal. on gasoline to the same percentage of product value as that 1¼¢ represented when imposed over 25 years ago would be deemed appropriate. This would put the fee around 10¢/gal. at today's prices for gasoline.

QUESTION 12

Wouldn't governments just increase subsidy (by amount of any import fee) to retain their share of the U.S. market?

The answer to this one is an emphatic "maybe." An OPEC nation, with a differential between crude "selling price" and actual "cost" being in the neighborhood of $25/bbl. or better could probably swallow a sizable fee with no problem. On the other hand, a European host country may very well object to any further subsidy to assure market penetration.

QUESTION 13

Is there a way to help our ailing domestic refining industry other than import fees or quotas?

Undoubtedly there are other ways, but they probably are not politically acceptable. Most other ways seem to imply some sort of domestic subsidy, and could create an international contest to determine who can subsidize best. U.S. refiners are not looking for a government handout. All they seek is a level playing field on which to compete fairly. U.S. refineries are probably the most efficient in the world. However, an operating advantage measured in pennies per barrel can not offset a raw material advantage measured in dollars.

Stated another way, the U.S. can not create an international free-market in petroleum. It can, however, create an internal free-market by placing all players domestically on a level playing field.

QUESTION 14

Would you prefer a quota or an import fee?

As stated earlier in our response to Question 5, the best way to guarantee the desired result of retaining an adequate domestic refining capacity is through imposition of a quota. However, quotas are politically unpopular, whereas fees seem to be more acceptable.

An auctioned quota, besides raising revenue for the government, has an added advantage of not excluding anyone willing to bid on import rights. Thus, there is always room for new importers and new refiners. A regular auction also would render routine a mechanism which could be used when and if the Strategic Petroleum Reserve is called upon, and a crude oil auction becomes necessary. This latter point would allay some fears that we will be unready for an import emergency, no matter when it comes, because we will have no experience with emergency procedures.

QUESTION 15

How would we determine an appropriate quota level? What is our estimate of an effective quota level?

An effective quota level could be determined from historical precedent -- representing a level of imports when domestic refining capacity was adequate. For instance, today we need about 400M B/D more refining capacity to guarantee full utilization of the SPR. A reduction in gasoline imports of about 200M B/D should encourage domestic development of at least this much capacity. A proper quota level would then be about 200M B/D less gasoline and gasoline blending stock than is being imported today.

PEG
The Petrochemical Energy Group
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August 22, 1985

Honorable Don Nickles, Chairman
Honorable John Warner
Subcommittee on Energy Regulation
and Conservation
Committee on Energy and Natural Resources
United States Senate
Washington, D. C. 20510

Dear Senators Nickles and Warner:

On behalf of the Petrochemical Energy Group (PEG), I am pleased to provide the following responses to your follow-up questions to Philip Rathburn's appearance on behalf of PEG before the Subcommittee on June 4, 1985:

Q. 1. Please provide the Subcommittee with your assessment as to why 111 refineries shut down since 1981.

A. 1. PEG has performed no independent evaluation or assessment as to why these refineries have shut down. However, PEG would refer the Subcommittee to the prepared testimony of Deputy Secretary Danny J. Boggs, submitted to the Subcommittee, wherein he indicated that two primary reasons for the refinery closings since 1981 have been the existence of excess capacity, which was the result of overbuilding in the 1970's on the basis of mistaken forecasts of demand, and the existence of small, inefficient refineries which had previously been subsidized under the entitlements program from 1974-1981.

Q. 2. In your opinion, have the closing of those 111 refineries affected U. S. consumers in any way?

A. 2. PEG is not aware of any data or government studies which would indicate that U. S. consumers have been adversely affected by refinery closings. To the extent refineries closed were those whose operation was based on government subsidies through the crude oil entitlements program, we believe overall refinery efficiency has been increased.

Q. 3. a. How much refinery capacity does the U. S. have?

A. 3. a. Deputy Secretary Boggs stated in his testimony before the Subcommittee on June 4, 1985, that the U. S. has a current distillation capacity level of about 15.6 million barrels per day.

Q. 3. b. How much refinery capacity does the U. S. need?

A. 3. b. PEG has not made an assessment of U. S. refinery capacity needs. We plan to review the National Petroleum Council's current study of U.S. refinery capacity needs when it is completed and will be in a better position thereafter to offer an opinion on this issue.

Q. 3. c. How much of U. S. refinery capacity is currently "excess"?

A. 3. c. PEG has not made an assessment of current "excess" U. S. refining capacity.

Q. 3. d. Given the current trend in refinery shut downs, when will the U. S. no longer have excess refining capacity?

A. 3. d. PEG is not prepared to make a prediction regarding future refinery capacity. In general, we believe the determination of appropriate refining capacity levels is best left to market mechanisms.

Q. 4. a. In your opinion, at what point will a decline of U. S. refinery capacity have a material impact on U. S. energy security?

A. 4. a. PEG would refer the Subcommittee to the testimony of the Deputy Director of Energy Programs, Office of the Secretary of Defense, given before the Senate Committee on Finance on June 21, 1985, which testimony stated that, even if U. S. refinery operating capacity falls another one to two million barrels per day, "it would be difficult to argue that a national security threat existed."

Q. 4. b. Given the current trends in capacity, when will we reach that point?

A. 4. b. Please refer to the Answers to Question 3 above.

Q. 5. a. Do you believe that foreign countries are subsidizing their refiners as is indicated in the May 1985 ITC study?

A. 5. a. The report found that in a number of oil producing countries general domestic oil and gas pricing policies often yielded domestic prices lower than world prices; however, the study also found substantial input cost differentials for foreign petrochemical producers.

Q. 5. b. Do you believe that foreign refiners are using this subsidy to compete unfairly?

A. 5. b. PEG has not seen evidence of significant instances of foreign refiners using unfair competitive practices.

Q. 5. c. What, if anything, should the government do to prevent these subsidies from adversely affecting our petroleum industry? What would be the costs and benefits of such protection?

A. 5. c. At this time PEG strongly opposes tariffs, fees, quotas or taxes on imported crude oil or products to protect the U.S. petroleum refining industry.

As to the costs and benefits of protectionist measures, PEG would refer the Subcommittee to the testimony originally filed by PEG with the Subcommittee, wherein the high costs of oil import fees, quotas and tariffs were detailed. Those costs included higher energy costs for all U. S. consumers and for many vital U. S. industries. The competitiveness of all impacted industries would be adversely affected.

The higher feedstock and energy costs incurred by domestic petrochemical producers ultimately results in higher costs for downstream petrochemical-dependent industries, which must either be passed through to consumers, or absorbed by the manufacturer. These downstream industries are already facing stiff competition from foreign manufacturers. Eventually, higher domestic petrochemical costs will cause U. S. imports of petrochemicals and petrochemical-dependent products to increase, and exports to decline, resulting in the loss of additional manufacturing jobs to foreign manufacturers. These are only a few of the costs of protectionist measures such as crude oil import fees and quotas.

Q. 6. In your opinion, what will happen to U. S. refining margins and U. S. refiners when the export refineries under construction in Persian Gulf countries and elsewhere go into operation?

A. 6. Impact on margins will depend on world-wide market conditions as refineries go into operation; but market conditions will also influence when and whether these export refineries actually begin operating.

Q. 7. At what point will the shut down of U. S. refineries threaten the use of Strategic Petroleum Reserve oil?

A. 7. Not for the foreseeable future. In the event of a complete embargo of imported oil, a worst case scenario, the U.S. would only require about 13.4 million barrels per day of refinery distillation capacity. This is based on estimated daily domestic production of crude oil of 8.9 MMBD (July 1985 Monthly Statistical Report, American Petroleum Institute, August 14, 1985), plus 4.5 MMBD, which is the expected drawdown capacity of the SPR if it is filled to its goal level of 750 million barrels (H.R. Rep. 99-150, Strategic Petroleum Reserve: Budget and Policy Implications of the

Proposed Moratorium, Tenth Report by the Committee on Government Operations, pp. 34-36, May 30, 1985). Of course, if the drawdown rate is lower, even less refinery capacity will be necessary.

Q. 8. The East-West Center report, which the Department (of Energy) commissioned, concluded that:

> "If products are suddenly dumped, in a subsidized fashion, into the U. S. market, this could cause closure of a number of efficient, sophisticated refineries that ought to remain open in the long term. While long-term equilibrium may favor the efficient refiner, it is the short term in which firms must remain in business. While every effort should be made to avoid interference with the market, the U. S. should be prepared for the fact that trade barriers or abusive subsidization elsewhere might under certain circumstances require government action to protect efficient refiners from short-term bankruptcy."

What is your assessment of that statement?

A. 8. PEG believes that the establishment of trade barriers by other importing countries or abusive dumping and subsidization by crude producing countries could require a U.S. government response. We have seen no evidence of such circumstances as yet. In general, the analysis, conclusions and policy recommendations made in the East-West Center report appear sound.

Q. 9. The East-West Center report also noted that when surplus refining capacity is eliminated, a new kind of security risk could emerge. They stated that the "The destruction of refineries in politically unstable areas, through war or terrorism, could cause serious shortages if there is no slack refining capacity elsewhere."

What is your assessment of that statement?

A. 9. PEG would agree that if there is no slack refining capacity elsewhere, the destruction of refineries, by means of terrorism or otherwise, could cause a shortage of capacity. However, PEG notes that Deputy Secretary Boggs' testimony to the Subcommittee was that Free World refinery distillation capacity exceeds world oil demand by about 11 million barrels per day. This excess of capacity exists notwithstanding the fact that between 1980 and 1984 about 9 million barrels per day of capacity was shut down worldwide, of which 3 million barrels per day were in the U. S.

Q. 10. Secretary Boggs indicated in his testimony that restricting product imports would lead to the anomalous situation of increasing our dependence on Persian Gulf oil. He noted that 97 percent of our oil product imports come from non-Persian Gulf countries whereas the crude to replace these products would likely come from the Persian Gulf. What is your assessment of that statement?

A. 10. We believe any governmental policy which increases U.S. dependence on Persian Gulf oil is undesirable.

Questions from Senator Warner:

Q. 11. How high would an import fee have to be to make the U. S. refining industry competitive?

A. 11. PEG is not aware of any conclusive evidence that an import fee is needed to make the U.S. refinery industry competitive. We note, however, that the ITC's May 1985 study on foreign governments pricing policies with respect to natural resources indicated that Saudi Arabia, for example, has priced crude oil for domestic use at between $3.00-6.00 per barrel. At the time the study was assembling the published data, the OPEC marker price was $29.00 per barrel. Thus, theoretically, Saudi Arabia could match an import fee of more than $20.00 per barrel with an equivalent reduction in price, and maintain a constant, competitive total cost to the purchaser.

Q. 12. Since most of our imports of refined petroleum products are from government subsidized facilities, wouldn't these governments just increase their subsidies to retain their share of the U. S. market?

A. 12. In light of the cost/pricing data discussed above in Q/A 11, it appears that certain of these governments have the ability to subsidize significantly if their goal is to maintain a particular share of the U. S. market. In addition, as is indicated in both the East-West Center study and Deputy Secretary Boggs' testimony, the Arab OPEC nations' exports of refined products to the U.S. are a small share both of their total petroleum exports and of total U.S. petroleum imports. Thus, they have the ability to engage in substantial subsidization to maintain market share, if that is their policy goal, without making a substantial sacrifice in terms of their total revenues.

Q. 13. Is there any way to help our ailing domestic refining industry other than import fees or quotas?

A. 13. We do not believe there is as yet conclusive evidence that the refining industry as a whole is "ailing."

Q. 14. Would you prefer a quota or an import fee?

A. 14. PEG members' experience indicates that both quotas and import fees produce the same undesirable increases in energy costs. For American industry, including the petrochemical industry, energy input costs above world market levels make it difficult to compete for sales in the world markets in which our finished goods are sold or to compete in U.S. markets with products produced abroad.

Q. 15. How would we determine an appropriate quota level, and what is your estimate of what an effective quota level is?

A. 15. PEG does not believe that a quota is either an appropriate or an effective method of government intervention in the market place, as explained in our testimony.

Thank you again for your interest and the opportunity to appear before your Subcommittee. If PEG can provide any additional information or be of any further assistance, please let us know.

Very truly yours,

E. E. Porter

E. E. Porter, Chairman
On Behalf Of
Petrochemical Energy Group

OCAW
Oil, Chemical & Atomic Workers
International Union, AFL-CIO

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Michael Ricigliano, Secretary - Treasurer
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August 16, 1985

Don Nickles, Chairman
Subcommittee on Energy
Regulation and Conservation
Washington, D.C. 20510

Dear Senator Nickles:

Enclosed is our response to your letter of July 18, 1985 requesting answers to questions arising out of the hearing held on June 4, 1985.

1. We in OCAW have seen two fairly distinct types of refinery closures that have put many of our members out of work. The first set of closures involved those refineries whose livelihood was closely entwined with the continuing Federal regulatory benefits that they had earned under various price control programs. When these programs ended in January of 1981, the days of guaranteed profit were suddenly gone, and these refineries could not compete. Generally, they were small and not highly sophisticated plants. The second type of refinery that has closed in this first phase of closures was the older, less sophisticated refinery of refiners with multiple facilities. In an effort to consolidate their operations and cut expenses, many of them closed some of their outmoded facilities, choosing to place their new capital investment in their newer facilities that were capable of handling lead-phasedown and lower quality crude oils, while making a full slate of refined products. The latest phase of refinery shutdowns, and the one that has us most concerned, is the shutdowns we are seeing today, of more complex facilities in which heavy capital investment has been made, which simply cannot buy crude oil off the market and refine it into petroleum products at a profit. This is the result of increased imports of refined products. This lack of profit, even on an incremental cost basis, and without attempting to recover capital costs, is what is putting more and more of our members out of work. These jobs are going to overseas facilities, with overseas labor and overseas profits. We must preserve an American refinery industry.

2. The closure of these refineries has neither helped nor hurt the consumer yet, but the potential damage to the consumer's long term interest is substantial. The first wave of refinery closures took away some inefficiencies in refining that were necessary to remove, particularly in light of the reduction in petroleum demand. The latest phase of shutdowns hasn't hurt the consumer yet, because of adequate supplies in the nation. In fact, the lower product prices in the U.S. caused by subsidized product imports which have driven down the marginal price of all barrels, have probably saved the consumer some expense on barrels today. This is very short-term thinking, though, because when the competition from domestic refineries is reduced, there will be nothing to prevent the prices from rising sharply. All these dollars used to purchase foreign oil in increasing quantities is increasing the balance of trade deficit, and hurting the economy in a major way.

3.a. As of January 1, 1985 the U.S. had 14.4 million barrels per day of "operating" refining capacity. We estimate the correct figure today may be as low as 14.1 million barrels per day. DOE reports that there was an additional 1.3 million barrels per day of idle refining capacity, as of January 1, 1985. However, it is very unlikely that this idle capacity could actually be put back into operation in an emergency.

3.b. The U.S. needs no less than 14 million barrels per day of "operating" or actually "operable" refining capacity. We should not permit this nation to make the mistake yet another time and become overly reliant upon other nations for supply. In times of emergency, we have spent billions on a Strategic Petroleum Reserve of crude oil, and we must have the refining capacity available quickly in that emergency situation, should a disruption occur.

3.c. There is very little "excess" refining capacity in the U.S. today. There will still be further closures of refining facilities caused by the inability of some refineries to meet the more stringent lead phasedown requirements, and their failure to make capital investments to change their capabilities. At the same time, there will be major upgrading of operating refining facilities' downstream plants. No more refineries should be permitted to close as a result of new refining facilities beginning operations overseas, or foreign refineries increasing their operations at the expense of ours closing.

3.d. The U.S. is at that point now. Congress should act immediately to restrict the flow of imported products such as gasoline that force U.S. refineries to close, through a tariff or a quota or some combination of these.

4.a,b. We are already at that point. The departure of refinery workers from refineries represents a permanent loss of skilled workers. It would take months to train and relocate these workers in an emergency.

5. Yes. It is hard to believe that our refineries, which are the most sophisticated in the world for making the products our economy requires, cannot compete successfully against offshore refineries. As the ITC shows in several nations, the raw materials from which petroleum products, petrochemicals and other materials are made have been substantially subsidized by the governments in the nations where they are located. With the new barter deals in which OPEC nations are engaging, the natural resource subsidies are being shifted to other nations, who will "dump" their products in this market.

5. b and c. Foreign refiners are using this subsidy unfairly. After U.S. refiners disappear to the point where there is a permanent need for U.S. dependence on these sources of supply, the subsidies will be less, and the profits for these offshore operations greater. Congress should enact the natural resource subsidy legislation which is pending before it, but should act even more quickly to restrict the flow of products before our capacity is shutdown for good. While there is a cost to such restrictions, we are convinced that the long term benefits to the U.S., in the event of an emergency, are well worth the cost, particularly in comparison to what we have already spent on the SPR.

6. To the extent that export refineries wish first to establish a base of operations in a new market, such as the U.S., they will subsidize their export products to the extent necessary to close refining operations in the U.S. After they have thereby established a dependence on their supply to meet U.S. demand, by eliminating U.S. profit margins for refining and marketing, they will raise their prices and take the additional profits for themselves. This is particularly true with respect to gasoline from offshore refineries, since gasoline is the profit-product by design for U.S. refineries.

7. We believe the U.S. is already at this stage. In part, this measure depends upon your assumptions about SPR drawdown capacity. If you assume the current drawdown capacity from SPR of 2.7 million barrels per day, and U.S. crude oil and production of around 8.7 million barrels per day, we still have adequate refining capacity. If you assume the drawdown rate of 3.1 million barrels per day after the current enhancements are made, then you are just about where you cannot afford to lose any more capacity. Since refineries cannot operate for any extended period over 90% of capacity, with 14.4 million barrels of operating capacity today, you can refine at most 13.0 million barrels per day. The 8.7 domestic crude oil plus the 3.1 from SPR puts you at that minimum safe level today, because we are afraid another million barrels will be lost to lead phasedown and further consolidations.

8. We agree completely with this particular statement from the East-West Center study. Not only should the U.S. be prepared for the likelihood that offshore subsidization may shutdown efficient U.S. refiners, but the government must take some action to prevent this irreparable loss from occurring.

9. We agree with this statement. One of the old reliable areas of additional offshore refining capacity, the Caribbean, no longer has the surplus of refining capacity that it used to. Many of the larger refineries that had some light products refining capability, such as Aruba, are out of business. Many of the developing nations from which we are currently getting supplies will soon have internal demand to supplant their export capabilities, such as Mexico and Venezuela. This will leave us more dependent upon remote sources of supply that must cross a large expanse of water to reach the U.S. market, with a several week shipping time. Any loss of major refineries supplying Europe or the U.S. could have a devastating impact upon product supply for any nation dependent upon it, and would certainly cause a serious runup in prices worldwide if a bidding war were the way to assure additional supply.

10. The statement made by Secretary Boggs is without merit. Whether the product imports come from Europe or the Middle East, most likely the crude oil from which the products are made is from the Middle East. The world's incremental oil supply is there, after all. Even European refined product doesn't necessarily help, if it is merely a processing agreement with, for example, an Italian refiner to toll-process some OPEC oil, and then let the OPEC country market the export product. Further, our economic dependence is much less, to import lower cost crude oil and add the value through processing

to it here in the U.S. with U.S. labor, than it is to purchase higher priced product from aboard, eliminate U.S. jobs in refining and support services, and increase the trade deficit. Other than indigenous Western Hemisphere crude supplies, which appear limited, where is the incremental crude oil supply going to come from? The Persian Gulf, most likely, regardless of where the products are refined.

11. It is difficult to determine just what level of import fee would be sufficient to keep the U.S. refining industry competitive. First, you need to establish which products would be subject to a fee. Then, you need to look at the market prices in other nations as compared to ours, and, particularly, you need to look at the tariff and non-tariff barriers to imports in those nations. Further, you need to examine whether the natural resources from which the imported products are made are subsidized by the exporting nation, somehow. These detailed examinations are necessary to measure the artificial economic structures which an import fee would have to fully offset if it were to repair the disadvantages of unfair trade practices.

Although we have described a difficult set of measures, it appears that a minimum tariff of 11 cents per gallon on gasoline, or about $5 per barrel, would be needed today to divert some of the gasoline imports newly coming here from Europe and the Middle East to other markets instead of just the U.S. market.

12. At some point, foreign governments should want to operate their refineries and sell their crude oil at the maximum possible price. The only solution to their interim policy of bottomless subsidies is something like the Gibbons and Baucus/Long approach, where an automatic countervailing duty is applied to the measured level of subsidy, which is the difference between the transfer price internally and the world market price for the same raw material.

13. We are not sure, but certainly the Congress should assist in urging the Administration to undertake a careful examination of available options. So far, we believe that tariffs or quotas or a combination of the two are the best possible remedy, to stop the flood of imports before more efficient refineries are closed. Time is of the essence, and trade cases do not offer a timely remedy.

14. Either option is far better than where we are today, with noeffective barrier to imports of petroleum products. Looking at the Japanese situation, for example, they have a quota of sorts, that simply disallows any gasoline imports into the nation, to protect their refineries. We don't have a strong preference for quotas over fees, or vice-versa. We do have a strong preference that one of these measures should be implemented, quickly.

15. The longer we wait, and the more refineries close, the more dependent we are for offshore refineries to refine our supplies. In order to avoid shortages, a quota would have to permit some level of imports, which could decline over time, as industry improved its downstream capability to make light products. If a quota were enacted today, we believe a level of

about 200,000 barrels per day should be permitted entry. If these quota rights were auctioned off by the U.S. government to the highest bidder, the U.S. government would capture the "tariff" and strong incentives would exist to find the lowest cost source of supply offshore. The consumer in the U.S. would benefit from both of these aspects of a market auction quota.

We hope that this adequately covers the questions included in your letter of July 18, 1985.

Sincerely,

Nolan W Hancock

Nolan Hancock, Director
Citizenship-Legislative Department

NATIONAL PETROLEUM REFINERS ASSOCIATION

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URVAN RUIZ STERNFELS
PRESIDENT

August 16, 1985

The Honorable Don Nickles
Chairman, Subcommittee on Energy
Regulation and Conservation
Washington, D.C. 20510

Dear Senator Nickles:

It is with pleasure that I forward responses of the National Petroleum Refiners Association to the follow-up questions you sent on July 18, 1985. I want to again thank you and your Subcommittee for the courtesies shown me during my appearance before you on June 4, 1985.

The information contained herein reflects the views of the great majority of the NPRA membership, but I would be remiss if I did not state what you already know, which is that these views are not held by all the refiners and petrochemical manufacturers we represent. I am certain you will hear from many of our members on their assessments and recommendations on the vital subject of imported petroleum products.

Sincerely,

Urvan R Sternfels

Attachment

Q1 Please provide the Subcommittee with your assessment as to why 111 refineries shut down since 1981.

A1 A large number of the refineries that ceased operation since 1981 were small and inefficient facilities that prospered during the period of the federal government's crude oil entitlements program, in particular the small refiner bias program. Their demise was due to the discontinuance of these programs and the significant reduction in petroleum product demand which followed the sharp increases in crude prices in the late 1970's. More recently, plant closures have involved complex refineries forced out of business during a period of relatively stable energy demand, and continued pressures from off-shore light product imports.

Q2 In your opinion, have the closing of those 111 refineries affected U.S. consumers in any way?

A2 We believe that elimination of refineries serving local geographical areas may have lessened competition in those product markets and created some regional product supply dislocations.

Q3 a. How much refining capacity does the U.S. have?

b. How much refining capacity does the U.S. need?

A3 a/b According to the Department of Energy, the United States currently has 15.7 million barrels per day of operable crude distillation capacity. This includes 1.4 million barrels per day of idle capacity, some undetermined portion of which can be restarted within 90 days. At a minimum, the United States needs refining capacity capable of processing domestically produced crude (about 9 million b/d) and the planned draw-down rate for the Strategic Petroleum Reserve (4.5 million b/d), with appropriate allowances for reasonable maximum utilization rates of 92 percent. This means that our minimum operating refinery capacity should be 14.7 million b/d if all foreign petroleum imports are cut off. It should be noted that crude distillation capacity may not adequately represent the capability of the domestic refining industry because downstream equipment limitations and environmental constraints such as lead phasedown may limit the amount of high quality fuels such as unleaded gasoline the domestic industry can produce.

Q3 c. How much of U.S. refining capacity is currently "excess?"

A3 c. As indicated above, there is little or no excess refining capacity.

Q3 d. Given the current trend in refinery shut downs, when will the U.S. no longer have excess refining capacity?

A3 d. See above. Note: DoE data and most reference studies on imports treat Puerto Rico and the U.S. Virgin Islands as if they were foreign countries. However, in a petroleum supply emergency, an additional 1/2 million b/d of additional refining capacity in these islands might be available, under favorable conditions.

Q4 a. In your opinion, at what point will a decline of U.S. refinery capacity have a material impact on U.S. energy security?

Q4 b. Given the current trends in capacity, when will we reach that point?

A4 a/b A level of refinery capacity which permits the United States to meet its basic energy needs and national defense requirements (as defined by the Department of Defense) from domestic resources, must be maintained. Due to the variables involved in this question, we are unable to predict when we will go below that point.

Q5 a. Do you believe that foreign countries are subsidizing their refiners as indicated in the May 1985 ITC study?

b. Do you believe that foreign refiners are using this subsidy to compete unfairly?

A5 a/b We are not in possession of facts to make a judgment on subsidization. However, many of our members complain that government-owned or controlled refineries have introduced refined products into the international market (including the United States) below the market price for crude oil. Advantages of low raw material costs, and lower environmental, tax and operating costs afford unfair advantages to foreign refiners which undermine the ability of U.S. refineries to compete and thereby continue to operate.

Q5 c. What, if anything, should the government do to prevent these subsidies from adversely affecting our petroleum industry? What would be the costs and benefits of such protection?

A5 c. The United States cannot prevent unfair activities by foreign governments or refiners, but it can and should respond to any resulting unfair competition within its borders--regardless of costs, since its vital interests are threatened.

Q6 In your opinion, what will happen to U.S. refining margins and U.S. refiners when the export refineries under construction in Persian Gulf countries and elsewhere go into operation?

A6 If refined products from these new facilities enter the United States at below-market prices it is reasonable to assume that domestic refiners will be adversely affected and more of them will shut down.

Q7 At what point will the shut down of U.S. refineries threaten the use of Strategic Petroleum Reserve oil?

A7 We are at or near that point now.

Q8 The East-West Center report, which the Department commissioned, concluded that:

> "If products are suddenly dumped, in a subsidized fashion, into the U.S. market, this could cause closure of a number of efficient, sophisticated refineries that ought to remain open in the long term. While long-term equilibrium may favor the efficient refiner, it is the short term in which firms must remain in business. While every effort should be made to avoid interference with the market, the U.S. should be prepared for the fact that trade barriers or abusive subsidization elsewhere might under certain circumstances require government action to protect efficient refiners from short-term bankruptcy."

What is your assessment of that statement?

A8 We believe this is a valid concern. Dumping and abusive trade practices by foreign nations call for positive responses by the U.S.

Q9 The East-West Center report also noted that when surplus refining capacity is eliminated, a new kind of security risk could emerge. They stated that "The destruction of refineries in politically unstable areas, through war or terrorism, could cause serious shortages if there is no slack refining capacity elsewhere."

What is your assessment of that statement?

A9 We believe that recent terrorist activities throughout the world demonstrate that a determined effort to sabotage refinery capacity would likely be successful anywhere in the world.

Q10 Secretary Boggs indicated in his testimony that restricting product imports would lead to the anomalous situation of increasing our dependence on Persian Gulf oil. He noted that 97 percent of our oil product imports come from non-Persian Gulf countries whereas the crude to replace these products would likely come from the Persian Gulf. What is your assessment of that statement?

A10 Any reduction of product imports by the United States would not necessarily increase our dependence on Persian Gulf crude oil. Refiners would be free to obtain crude oil from a large variety of crude sources provided we maintain the ability to refine it within our borders.

Questions from Senator Warner

Q11 How high would an import fee have to be to make the U.S. refining industry competitive?

Q12 Since most of our imports of refined petroleum products are from government subsidized facilities, wouldn't these governments just increase their subsidies to retain their share of the U.S. market?

Q13 Is there any way to help our ailing domestic refining industry other than import fees or quotas?

Q14 Would you prefer a quota or an import fee?

Q15 How would we determine an appropriate quota level, and what is your estimate of what an effective quota level is?

A In terms of supplying the domestic demand for quality refined products, the United States refining industry is technically superior to most refining elsewhere in the world and, absent unfair or preferential treatment, is competitive. We believe that whatever actions are chosen to avoid further erosion of the domestic refining industry, a clear message must be sent to demonstrate a national resolve to keep the United States from becoming a dumping ground for product imports that threaten our national security.

Our import control system must be examined in light of a multiplicity of import restrictions in Europe, Japan, and other marketplaces for petroleum products so that U.S. refiners are not unfairly disadvantaged.

The U.S. Government must review tariff levels and clarify existing tariffs on naphtha, gasoline, gasoline blending stocks, and alcohol to insure that these products enter into the U.S. at duty rates which the Congress intends. In the course of such a review, access to foreign petrochemical feedstocks should be maintained at current tariff levels.

The U.S. Customs service should act in assuring tighter, more effective and consistent enforcement of tariff schedules with increased surveillance of imported product specifications to assure that the proper tariff rate is applied.

Some combination of increased tariffs and quotas might ultimately be implemented, dictated by national objectives, with the goal of maintaining a secure domestic refining industry.

In addition, care should be taken to not impose new taxes on the industry which is already heavily burdened.

Mobil Oil Corporation

SUITE 620
1100 CONNECTICUT AVENUE N.W.
WASHINGTON D.C. 20036

August 29, 1985

Mr. Howard Useem
General Counsel
Senate Energy and Natural Resources
Subcommittee on Energy Regulation
212 Hart Senate Office Building
Washington, DC 20510

Dear Mr. Useem,

Dow Davis has indicated it would be appropriate to request that you include Mobil's enclosed submission to NPRA in the record of the Subcommittee on Energy Regulation June 4 hearings on the domestic petroleum industry. This paper was prepared in response to Senator Nickles July 18, 1985 questions.

Sincerely,

Barney J. Skladany, Jr.
Manager, Government Relations
U.S. Marketing & Refining

BJS:plb
Enclosure

RECEIVED AUG 29 1985

Mobil Oil Corporation

3225 GALLOWS ROAD
FAIRFAX, VIRGINIA 22037

EDWARD P. HARDIN
VICE PRESIDENT — MANUFACTURING
MARKETING AND REFINING DIVISION — U.S.

August 13, 1985

Mr. Urvan R. Sternfels
President
National Petroleum Refiners Association
1899 L Street N.W.
Suite 1000
Washington, D. C. 20036

Dear Mr. Sternfels:

In response to Senator Nickles request of July 18th to NPRA, attached are Mobil's recommended responses to his questions concerning the impact of imported petroleum products on the domestic petroleum industry.

Please feel free to contact me if we can be of any further assistance.

Sincerely,

EP Hardin

E. P. Hardin

jac
att.

RESPONSES TO SENATOR NICKLES' JULY 18, 1985 QUESTIONS TO THE NATIONAL PETROLEUM REFINERS ASSOCIATION ON THE IMPACT OF IMPORTED PETROLEUM PRODUCTS ON THE DOMESTIC PETROLEUM INDUSTRY

Q1 Please provide the Subcommittee with your assessment as to why 111 refineries shut down since 1981?

A1 These refineries along with capacity reductions in other operating refineries were shut down due to the significant reduction in petroleum product demand which followed the sharp increase in crude prices in the late 1970's. Price induced conservation caused petroleum demand to fall by about 3.6 MMBD by 1983. This left the industry with a large amount of unneeded refinery capacity and free market economics forced the least efficient of these to close down. Some of the refineries to close were the result of efforts of larger companies with multiple refineries to "rationalize" their own refining systems. Not only did they close their older and less efficient units, they also invested billions of dollars to upgrade most of the remaining capacity to process heavier lower cost crudes and to provide the changing product mix the market requires. Many of the balance of the refineries to shut down were small and largely inefficient refineries which were "thrown together" as a direct result of subsidies conferred through the federal government's crude oil entitlement program and, in particular, Small Refiner Bias programs. For example: from 1974 to 1981 there were over 60 refineries constructed in the U.S. of less than 30 TBD capacity and two thirds of these were under 10 TBD. These were largely inefficient fuels type (distillate and residual fuel oil) refineries that were unable to compete in a decontrolled environment.

Q2 In your opinion, have the closing of those 111 refineries affected U.S. consumers in any way?

A2 Yes, in a positive way. Consumers continue to benefit from lower prices brought on by decontrol in 1981. The petroleum industry has become more competitive and the free market has helped the battle against inflation.

Q3a How much refining capacity does the U.S. have?

A3a The U.S. currently has 15.7 MMBD of operable crude distillation capacity (per DOE May "Petroleum Supply Monthly"). This includes 1.4 MMBD of idle capacity which can be restarted in 30 days, or, if under active repair, in 90 days. Including Puerto Rico and the Virgin Islands, total capacity increases to 16.4 MMBD.

Q3b How much refining capacity does the U.S. need?

A3b U.S. petroleum product demand was 15.7 MMBD in 1984, and is forecast to be about the same in 1985. A significant portion of this demand is met by natural gas liquids (1.6 MMBD in 1984), refinery processing gain (0.6 MMBD in 1984), and net product imports (1.4 MMBD in 1984). This leaves a refinery distillation unit input requirement of only about 12.0 MMBD (in 1984). Therefore in 1984, assuming a reasonable maximum utilization rate of about 92%, the U.S. needed 13.0 MMBD of distillation capacity and about the same should be true for 1985 (including Puerto Rico and the Virgin Islands, demand and refinery capacity needs would increase by 0.2 MMBD).

Q3c How much of U.S. refining capacity is currently "excess"?

A3c Based upon current demand and imports of 1.4 MMBD, the U.S. has 2.7 MMBD of excess capacity, i.e., 15.7 MMBD of actual refinery capacity in May of 1985 less 13.0 MMBD of required capacity. If Puerto Rico and the Virgin Islands demands and refinery capacity are included, the excess is increased to 3.2 MMBD.

Q3d Given the current trend in refinery shut downs, when will the U.S. no longer have excess refining capacity?

A3d The downward trend in refinery capacity ended in late 1984. Through May of 1985 industry distillation capacity increased by 0.3 MMBD including idle capacity. Although some additional net refinery shutdowns can be expected, it is very unlikely the U.S. will reach a point where it doesn't have some level of excess capacity. Excluding idle facilities, U.S. distillation capacity is not expected to fall below about 14.0 MMBD. This level of capacity, when coupled with a total of 1.6 MMBD of NGL production, 0.6 MMBD of refinery processing gain, and 1.4 MMBD of product imports, adds up to about 17.5 MMBD of supply. This level is more than sufficient to meet anticipated future product demand and leaves an additional reserve in idle facilities of 1.0 MMBD more or less.

NOTE: DOE data and most referenced studies on imports treat Puerto Rico and the U.S. Virgin Islands as if they were foreign countries and the crude and product movement between these two islands and the U.S. mainland as imports and exports. However, under any petroleum supply emergency the U.S. must share its crude oil and/or products with these U.S. dependencies. Making the adjustments required to bring Puerto Rico and the U.S. Virgin Islands within the U.S. petroleum supply area decreases U.S. imports numbers by 0.2 MMBD, increases demands by 0.2 MMBD and adds 0.7 MMBD of refining capacity. Since neither island has indigenous crude this means the U.S. actually has 0.5 MMBD more spare refining capacity than shown in the DOE data and in responses to a number of the questions herein.

Q4a In your opinion, at what point will a decline of U.S. refinery capacity have a material impact on U.S. energy security?

A4a U.S. energy security is much more a function of our domestic production of crude oil, natural gas and coal, and of course, the build up of the SPR, than of refinery capacity in any foreseeable outlook. Nevertheless, with future (end of decade) U.S. domestic demand assumed slightly higher than today at about 16.0 MMBD, and with the supply of NGL at 1.5 MMBD, refinery processing gain at 0.6 MMBD, and net product imports at 1.5 MMBD, U.S. distillation input required would be about 12.4 MMBD. Recognizing that a reasonable level of industry utilization of refining capacity should be in the order of 92%, distillation capacity would have to fall below about 13.5 MMBD before normal product demands would be in jeopardy of being met. A reduction in U.S. refining capacity to this level appears highly unlikely. However, given the excess refinery capacity worldwide and the surplus of crude worldwide, the only jeopardy to our national security would be in the instance of a major oil supply emergency. In that scenario, assuming total loss of crude and product imports, crude supply, not refinery capacity would be the limiting factor. Refining capacity would be needed to process the 8.9 MMBD of domestic crude plus a maximum 4.5 MMBD of SPR crude or 13.5 MMBD. This capacity, operating at a utilization of about 92%, in conjunction with 1.5 MMBD of NGL and a processing gain of 0.6 MMBD would be sufficient to provide about 14.0 MMBD of products or 90% of current demand. The balance of demand would need to be satisfied by securing additional supplies of crude for processing or by switching to alternate fuels, particularly coal and natural gas and through conservation. Refining capacity would not be the limiting factor.

Q4b Given the current trends in capacity, when will we reach that point?

A4b We don't think that U.S. refinery capacity will decline to a point at which it will impact on U.S. energy security. As indicated above, refinery capacity excluding idle is not anticipated to fall below a level required under various scenarios. In addition, the U.S. industry usually retains a level of idle capacity for safety/security of supply. In 1984, there was 1.4 MMBD of such capacity, and although this may indeed decline in the future, it is unlikely that it will fall below 0.7 MMBD. Proponents of protectionism have tried to cast doubt as to the future ability of the U.S. to cope with a loss of light product imports, alleging that much of the idle capacity could not actually be restarted in time to alleviate a shortage. An analysis of this capacity shows that about half of the idle capacity is located within the gates of operating refineries and as such it should be able to be reactivated quickly. Further, with all the sophisticated secondary processing units having been added by U.S. refiners in recent years, there is considerable operating flexibility to shift production to either gasoline or to distillate to cover any specific import loss. Therefore, the optimum mode during a supply emergency, assuming refinery operating rates were tight, would be to maximize gasoline production in operating refineries and reactivate the crude distillation units and associated treating facilities of whole idle refineries. These units can be restarted in a relatively short period of time and in production to produce naphtha, distillate and residual fuel oil. Thus it would appear likely that idle capacity can be utilized in a timely fashion to supplement operating units.

Q5a Do you believe that foreign countries are subsidizing their refiners as is indicated in the May 1985 ITC study?

A5a No, not any more than U.S. refiners are being subsidized. The reality of the refining industry is that, with some 18.0 MMBD of surplus refining capacity throughout the world, refining margins have been so tight as to barely cover operating expenses with little or no return on capital investment. Until refining capacity rationalization is complete and product supply and demand are in relative balance once again inefficient and poorly operated refineries in the U.S. and abroad will continue to be shut down. To a great extent this already has occurred in the U.S. as operating rates are up to about 85%, however, a great many more units will need to be shut down in Europe and other free world areas as operating rates on average are only about 70%. Given this surplus, substantial volumes of product are available at spot market prices. However, if subsidies are indeed evident existing laws and GATT provide the opportunity to shut off product imports from the offending countries.

Regarding the allegations that nations owning both the crude oil and the new export refineries are likely to subsidize their refining entities in order to dump products in the U.S. at below cost, we believe that this would be a very unlikely action. Most of the new export refineries are located in countries where crude oil sales are relatively large vs. product sales. Dumping products on the market at a lower than market price would soon cause crude prices to fall and this would seriously erode that country's revenues on crude. Further, once the crude price dropped crude and product prices would again achieve a normal relationship and eliminate the problem perceived by some U.S. refiners.

Q5b Do you believe that foreign refiners are using this subsidy to compete unfairly?

A5b No, because we do not believe the countries owning the export refineries are subsidizing their refining entity. They, like U.S. refiners in a tight market with low margins, may be receiving little or no return on their investment.

Q5c What, if anything, should the government do to prevent these subsidies from adversely affecting our petroleum industry? What would be the costs and benefits of such protection?

A5c Not applicable in view of responses given to Questions 5a and 5b above. We would offer the history of protectionism, however. It does not work. Bottom line, trade barriers serve to reduce competition and increase consumer prices as other countries retaliate with their own trade barriers. Each country reaches its own level of inefficiency.

Q6 In your opinion, what will happen to U.S. refining margins and U.S. refiners when the export refineries under construction in Persian Gulf countries and elsewhere go into operation?

A6 The operations of the new export refineries in the Middle East and North Africa are not expected to have a significant impact on U.S. refining margins or U.S. refiners. PIRINC[1] reported in June 1985 that the increase in OPEC's capability to export light products is expected to increase from 1020 TBD in 1984 to 1845 TBD in 1990 or an increase of 825 TBD, most of it sourced from the Middle East and North Africa. While this forecast appears to be plausible there should be two reservations. First, it is likely that some 200-300 TBD of this capacity could be cancelled because of economics. But even more important is that the study, nor any other public study issued to date, point out that these are fuels refineries and that less than 25 percent of their capacity, or about 200 TBD, would be gasoline, the imported product cited as being a concern by most proponents of quotas or higher tariffs. A possible maximum 200 TBD increase in gasoline exports from the Middle East/North Africa, for example, even in the very unlikely event that it all flowed to the U.S., could hardly be a security threat given the domestic demand of over 6,500 TBD.

A much greater concern with imports is the known abuse of anomalies in the U.S. Tariff Schedule which allows evasion of Congressionally intended tariffs on alcohol in gasoline, gasoline blend stocks and certain distillates. These abuses undoubtedly have contributed to the recent increases in U.S. gasoline and other light product imports.

Overall, the U.S. refining system is the most technologically advanced and has the lowest cost economic supply in the world. These facts plus the long distance between the Persian Gulf and the U.S. and the higher transportation cost for product vs. crude oil makes the U.S. an unlikely long term ongoing market for these refined products. These supplies will much more likely go to Europe and the Far East where the costs of transportation are lower and the average operating refinery is much less efficient. Therefore we would not expect these export refineries to have a significant impact on either U.S. refining margins or capacity.

[1] Petroleum Industry Research Foundation, Inc.

Q7 At what point will the shut down of U.S. refineries threaten the use of Strategic Petroleum Reserve oil?

A7 U.S. energy security is much more a function of our domestic production of crude oil, natural gas and coal, and of course, the build up level and drawdown rate of the SPR, than of refinery capacity in any foreseeable outlook. The most likely scenario in a severe energy supply emergency would not only see the U.S. cut off from most product imports but crude oil as well. Under this scenario refinery capacity should be sufficient to process the domestic production of crude, forecast to be no more than 8.8 MMBD, plus the 4.5 MMBD maximum drawdown rate of the SPR or 13.3 MMBD of capacity. In such an event a high utilization rate of 95% or more could be assumed since the SPR maximum drawdown rate can only be maintained for about 90 to 120 days (reference SPR Study). As SPR drawdown falls off, utilization rates would be eased.

Q8 The East-West Center report, which the Department of Energy commissioned, concluded that:

> "If products are suddenly dumped, in a subsidized fashion, into the U.S. market, this could cause closure of a number of efficient, sophisticated refineries that ought to remain open in the long term. While long-term equilibrium may favor the efficient refiner, it is the short term in which firms must remain in business. While every effort should be made to avoid interference with the market, the U.S. should be prepared for the fact that trade barriers or abusive subsidization elsewhere might under certain circumstances
>
> require government action to protect efficient refiners from short-term bankruptcy".

What is your assessment of that statement?

A8 It's not a realistic assessment. The U.S. refinery system is the most technologically advanced in the world and yields 53% gasoline whereas the most sophisticated of the new export refineries produces a yield of only 26% gasoline. Most of these refineries yield only 10-15% gasoline as they are mainly designed to yield low octane naphtha, jet fuel, light distillates and residual fuel oil. Further, as noted in the comments on Questions 6 and 9, in the unlikely event that all the export capacity projected to come on stream by 1990 from these Persian Gulf areas came to the U.S., it would represent only 7% or so of U.S. gasoline demand. Finally, most of these exporting nations are primarily crude oil producers and as such have much more to lose than to gain by subsidizing product exports, i.e., any products "suddenly dumped in a subsidized fashion" as stated in the East-West Center report could only force down the price of crude oil in world markets. This loss of crude oil sales revenue on much larger volumes of exported crude would far exceed any "gain" the exporting nation might achieve in quickly penetrating a refined product market with subsidies.

Several independent refiners, with efficient and sophisticated facilities, have experienced economic difficulties, including Chapter 11 proceedings, but these facilities will survive although perhaps under new ownership. The economic problem is perceived as one of expansion at the wrong time - i.e., during a fiercely competitive U.S. marketplace - a situation that would have occurred as U.S. refineries rationalized even if imported products had remained at the low 1981 level.

Q9 The East-West Center report also noted that when surplus refining capacity is eliminated, a new kind of security risk could emerge. They stated that "The destruction of refineries in politically unstable areas, through war or terrorism, could cause serious shortages if there is no slack refining capacity elsewhere."

What is your assessment of that statement?

A9 It is not a realistic assessment for the foreseeable future.

There is roughly 18 MMBD of excess refinery capacity in the Free World and it is quite unlikely that all of this bulge will go away. Historically, refiners retain some excess capacity to meet seasonal demand surges and to offset any unusual downtime for maintenance. Also, history has shown that anytime utilization rates reach or are forecast to reach near the 90% level, refiners begin to look at expansion either in new grass roots facilities or expansion of existing facilities. This, in fact, was the refining industry scenario in the U.S. in the late 1970's when the OPEC price increase drove down demand. Many refiners had expansion projects underway that continued to come on stream even though demand was falling. In fact, U.S. refinery operating capacity continued to grow in 1979 - 1981 by 1.2 MMBD even though demand peaked in 1978 and then fell dramatically until it bottomed in 1983. It is worthy to note that even in 1984, when refinery rationalization continued to shut down some refineries, expansions to capacity occurred in 26 operating refineries representing 0.2 MMBD additional capacity.

Additionally, the liklihood of a crude oil cut off occurring in the case of such acts of war or terrorism would make the refining capacity issue moot. Most likely the limited supply of crude rather than the amount of refinery capacity would be the controlling factor and the U.S. would take the appropriate steps to best utilize available supplies.

Therefore, as a minimum, we need to maintain adequate capacity to process our domestic crude production plus the maximum SPR drawdown in order to be prepared in our refining sector for wartime or terrorism scenarios.

Q10 Secretary Boggs indicated in his testimony that restricting product imports would lead to the anomalous situation of increasing our dependence on Persian Gulf oil. He noted that 97 percent of our oil product imports come from non-Persian Gulf countries whereas the crude to replace these products would likely come from the Persian Gulf. What is your assessment of that statement?

A10 For the long term, since the Persian Gulf holds the majority of the world's crude petroleum reserves, our dependence on this area, whether for crude or products or both, will increase. At the present, much of the refined product imports into the U.S. are from Europe, Canada, Venezuela, etc. (non-Persian Gulf countries) If imports of these products were restricted into the U.S., additional crude would have to be imported. But most short or medium-haul foreign crudes are logistically more attractive today to import rather than long-haul Persian Gulf crude. The source of this crude therefore, would depend on which particular crudes are the more economic at the time.

Questions from Senator Warner

Q11 How high would an import fee have to be to make the U.S. refining industry competitive?

A11 On balance, the bulk of the U.S. refining industry is already fiercely competitive. As a whole, it is the most technologically advanced and efficient refining system in the world because it was created and allowed to operate in a free market. It was only during the period of government controls that inefficiency arose and competition lessened. No new or additional fees are needed or necessary.

There are tariff anomalies that need to be corrected to prevent ongoing abuses which have lead to unwarranted increases in certain product imports.

Q12 Since most of our imports of refined petroleum products are from government subsidized facilities, wouldn't these governments just increase their subsidies to retain their share of the U.S. market?

A12 These same countries that are forecast to export so much product to the U.S. also export crude oil to world markets but in much larger volumes. If one or more OPEC nations undersold the market appreciably in low product prices, the fact would surface quickly and affect the crude market. In the aggregate they would not want to spoil their own major revenue market. If they did so, they would soon have to adjust crude prices downward. They cannot allow one or the other to get out of balance, the market won't permit it. So even if it were to occur it should be self correcting as far as the effect on U.S. refiners.

Q13 Is there any way to help our ailing domestic refining industry other than import fees or quotas?

A13 Yes. The current tariff anomalies that allow alcohol, alcohol/gasoline blends, gasoline blend stocks and motorfuel diesel to enter the U.S. at duty rates lower than intended by Congress are unfairly encouraging the import of certain light products and should be corrected.

In addition, care should be taken to not impose new tax burdens on the petroleum in~~dustry which~~ is already heavily taxed. For example, in Congressional action to extend Superfund, any additional assessment should be as broad based as possible so as not to further over burden the U.S. refining industry.

Q14 Would you prefer a quota or an import fee?

A14 Neither. The imposition of either would raise consumer prices and harm energy intensive U.S. industries trying to compete in U.S. and world markets. Either action would result in a drop of U.S. refining efficiencies and reduce competition and harm economic growth.

Q15 How would we determine an appropriate quota level, and what is your estimate of what an effective quota level is?

A15 A quota level is never appropriate. It is the beginning of tinkering with the market and a return to the type of government controls that caused all the problems in the 1970's.

Quotas are the beginning of a "cost plus" type U.S. refining industry that will increase public pressure for relaxed imports thence more shut down refineries. Were quotas to have been in effect during the unusually cold winter of 1983-84, there could have been a runout of heating oil in New England and in the Great Lakes areas.

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August 16, 1985

Senator Don Nickles, Chairman
Subcommittee on Energy, Regulation and Conservation
Committee on Energy and Natural Resources
Washington, D.C. 20510

Dear Mr. Chairman:

I sincerely appreciate the opportunity to respond to the subcommittee's follow-up questions regarding imports and domestic refining. I will do so in the order that the questions appear in your July 18 letter.

(1) PLEASE PROVIDE THE SUBCOMMITTEE WITH YOUR ASSESSMENT AS TO WHY 111 REFINERIES SHUT-DOWN SINCE 1981.

The most up to date detailed information covers the period January 1, 1981, to January 1, 1985. The Energy Information Administration's 1984 Petroleum Supply Annual states that over this period there was a net decline of 101 operable refineries. Refinery closings were not uniform across refinery size. As can be seen from the table below, shut-downs of refineries less than 50,000 barrels per day represent the overwhelming majority of closings, or 88 percent of all shut-downs.

Number of Operable Refineries by Size
As of January 1.

Crude Distillation Capacity (BPD)	1981	1985	change
Less than 10,000	91	56	-35
10,001 - 30,000	93	43	-50
30,001 - 50,000	42	38	-4
50,001 - 100,000	44	39	-5
100,001 - 175,000	27	25	-2
Over 175,000	27	22	-5

Source: Energy Administration Information, 1984 Petroleum Supply Annual

In order to understand what has transpired since 1981, it is important to understand what happened shortly prior to 1981. It is appropriate for this

Formerly National Oil Jobbers Council

question to begin in 1973, the beginnings of a new era in government regulation of the oil industry.

In the early 1970s, non-integrated refiners, worried by growing international crude oil prices in the face of domestic price control, sought help from the government.

The price of foreign crude oil relative to domestic crude made substantial gains. From 1973 to 1974, the refiners' acquisition cost of imported crude oil increased $4.08 to $12.52 per barrel, tripling in price, while domestic crude oil prices increased from $4.17 to $7.18 per barrel. Domestic crude oil was price controlled from August 1971, but prices were below those of foreign crudes until 1973-1974. The non-integrated refining community clamored that this would give the major integrated oil companies with substantial domestic reserves an "unfair" cost advantage over the independents and result in either sub-optimal profits or losses for this segment of the industry. In response to this argument, Congress enacted the Crude Oil Entitlements Program (COEP) and the Small Refiner Bias (SRB).

Under COEP, each domestic refiner was assigned entitlements to domestic crude oil based upon contemporaneous crude runs to still. If a refiner used more domestic crude then it had entitlements, it was required to purchase these entitlements from other refiners having more entitlements than they needed. The purpose of the program was to lower the cost of imported crude oil and to equalize domestic refining crude oil input costs. In this form, it actually encouraged increased importation of OPEC oil and resulted in a much larger transfer of this nation's wealth than would have occurred in the absence of the program.

The Small Refiner Bias altered the basic intent of COEP. The SRB allocated additional entitlements on a graduated scale to refiners refining on average less than 175,000 bpd. The number of SRB entitlements "is significant relative to the total number of entitlements issued," according to a D.O.E. study. Not only was the number of entitlements altered in favor of small refiners, but also the value of the entitlements increased as size decreased.

The Crude Oil Entitlements Program and the small refinery subsidies sheltered the inefficient and helped start many new, small refineries. New refineries sprang up with government guaranteed markets and cash subsidies from other refiners. Some inefficient refineries, which would have otherwise closed, remained open.

One estimate of the value of the small refiner bias placed subsidies at up to $22.9 million per refiner, for those with capacity of 10,000 barrels per day or less. According to a study by the American Enterprise Institute "the largest subsidies went to refiners in the 30,000 bpd class, $31.2 million in 1980. For a 10,000 bpd unit, the investment was $25 million, or approximately $36 million in 1978 prices and $42 million in 1980 prices. The subsidy, continuing year in and year out, was 19 percent of the initial investment in 1978 and 55 percent in 1980." The Oil and Gas Journal reported on March 26, 1979, that "... numerous tiny refineries have proliferated as a result of the small refinery entitlements bias. Since January 1, 1974, according to Department of Energy statistics, over 50 of these grassroots refineries have been built and added about 430,000 bpd of crude capacity. They added practically no gasoline making or high sulfur crude oil capability to industry totals."

There were additional programs to subsidize the small refiner such as small business loans, exemption from pollution control standards and set aside programs. According to a DOE study, Small Refiner Bias: Final Report, refineries with capacity under 30,000 bpd were too small to take advantage of economies of scale. This report concluded that there were "substantial economies of scale in the construction and operation of sophisticated refining equipment." In spite of the economic disadvantages of small refineries, the subsidy "was sufficient to support profitable operation at that level." Over 60 of the refineries to come on stream during this period had capacities of less than 30,000 bpd. The 1981 API report, The Mandatory Petroleum Price and Allocation Regulations: A History and Analysis, summed this up well. "In most cases, small refineries tend to operate most profitably (under the subsidies) when designed to operate on low-sulfur crude oil and to produce large quantities of products such as asphalt, residual oil and kerosene, and relatively little of those products, such as lead free gasoline, required by consumers. Accordingly, most new refinery capacity brought onstream after the adoption of the small refiner subsidies, was in the form of small refineries designed to operate on low-sulfur crude and to produce a relatively undesirable slate of products. The small refiner subsidies created additional refining capacity ill-suited to meet market demand for products..."

In summary, on the supply side, COEP and SRB encouraged the construction of small inefficient refineries and subsidized existing small inefficient refineries. It also encouraged the importation of more foreign oil by effectively lowering its price, thereby increasing our dependence on OPEC and the transfer of wealth to these countries.

So as can easily be seen, numerous small inefficient refineries came into being prior to 1981 in response to government subsidies and many inefficient refiners, who might have otherwise gone out of business, were kept viable by these programs. Of the 101 refineries shut-down since 1981, 54 were opened during the Crude Oil Entitlements Program. Eighty-eight percent of these refineries are under 50,000 bpd and were too small to benefit from economies of scale. Also, 56 percent had no downstream capacity. If one eliminates all those refineries which: (A) had no downstream capacity; (B) opened during the period of government subsidies; or (C) were too small to operate efficiently (under 50,000 bpd), then this leaves only 11 refineries whose closing must be explained through alternative reasoning.

The supply side incentives of government subsidization can easily explain the growth in the numbers of small refiners during the control period and their subsequent demise after subsidies were removed. In addition to these forces, other equally powerful forces were at work in the economy which began to lower demand for petroleum products in the face of growing capacity to supply.

Demand for petroleum products peaked in 1978 at 18.85 million bpd. Last year was the first time since 1978 that petroleum demand has reversed its downward trend. While demand was falling, however, government subsidies were still in place until 1981, and this made supply unresponsive to falling demand.

In a competitive environment, as demand fell relative to supply, marginally efficient refiners would be forced out of the industry. This would result in a contraction of supply, bring supply into line with demand, and the closure of marginally efficient refining capacity. Due to the government intervention, this process was impeded. It was precisely for this reason that decontrol came about - the need for industry normalization.

(2) IN YOUR OPINION, HAVE THE CLOSING OF THOSE 111 REFINERIES AFFECTED U.S. CONSUMERS IN ANY WAY?

No, we don't believe that consumers have been impacted by the closings of these refineries. As a nation, we are better off because now refined products are being produced by more efficient refineries. This led to less cost and lower prices for petroleum products, which is good for everyone.

(3) (A) HOW MUCH REFINING CAPACITY DOES THE U.S. HAVE?

The answer to this question depends upon how one chooses to define refining capacity. Currently most persons tend to speak in terms of crude distillation capacity measured in barrels per calendar day. In that case, EIA's latest Weekly Petroleum Status Report estimates that there is approximately 15.7 million bpd of operable refining capacity. This represents a decline from the peak capacity of 18.62 million bpd in 1981. Currently U.S. demand for petroleum products is 15.2 million bpd.

However, if capacity is defined as the ability to produce the products which are demanded, then a better measure would be downstream capacity, which tracks refining's ability to produce light end products. This capacity is comprised of fresh feed cataytlic cracking, catalytic reforming, hydrocracking and alkylation. In 1979, the industry had only 10.58 million bpd of this capacity or 62 percent of total crude distillation capacity. As of the first of this year total crude distillation capacity had fallen to 15.7 million bpd while downstream capacity had risen to 10.95 million bpd or 70 percent of total capacity.

(B) HOW MUCH REFINING CAPACITY DOES THE U.S. NEED?

America is not energy independent, and it has not been petroleum self-sufficient for some decades. We must import crude oil, petroleum products or some combination thereof. The correct amount of refining capacity is that amount determined by foreign crude prices, refining efficiencies and other relevant economic variables.

(C) HOW MUCH OF U.S. REFINING CAPACITY IS CURRENTLY IN "EXCESS"?

This is a difficult question to answer. There is an excess of crude distillation capacity, but this is an inappropriate measure of the industry's ability to meet demand. On the other hand, downstream capacity has been growing and will continue to grow. This is the measure of the industry's ability to produce the products demanded by our market.

The market seems to be functioning properly now. Since 1981, capacity utilization has been increasing and the latest EIA estimates place it at around 81 percent. The optimum refinery utilization rates lie between 80 and 90 percent.

There are still many small inefficient refiners with little or no capacity to produce light end products. To the extent that the market favors light end products, continuing pressure will be put upon these refineries. We currently have an excess of the wrong type of capacity as discussed above. However, the industry is responding. The Oil and Gas Journal's 1985 annual Construction Report shows more downstream capacity is being built. See Attachment I.

(D) GIVEN THE CURRENT TREND IN REFINERY SHUT-DOWNS, WHEN WILL THE U.S. NO LONGER HAVE EXCESS REFINING CAPACITY?

I do not know when excess capacity will cease to exist. As I mentioned previously, we have too much crude distillation capacity and not enough downstream capacity. So one measure is in excess and the other is not.

(4) (A) IN YOUR OPINION, AT WHAT POINT WILL A DECLINE OF U.S. REFINERY CAPACITY HAVE A MATERIAL IMPACT ON THE U.S. ENERGY SECURITY?

I am not an expert in these matter and cannot say with any certainty at what point U.S. refining capacity may cause energy security problems. I can say that we are not yet in a danger zone.

Imports of refined products, of crude oil, or both, are below historical levels in both the aggregate level of imports and the percentage of domestic consumption that they satisfy. We have also seen a shift away from an unstable area, from Arab Opec nations, to allies and areas closer to direct American influence. In these respects, the United States as become more secure, not less.

At present, operable domestic capacity is about 15.71 million bpd, while demand is currently running at 15.46 million bpd. There is still sufficient refining capacity to meet anticipate demand. The situation is quite reversed from earlier years. From 1960 to 1979, demand was greater than capacity in all but two years. Over the period 1970 to 1979, demand averaged 16.98 million bpd while refining capacity averaged 14.73 million bpd. In other words, it was necessary to import refined products and imported refined products claimed a greater share of domestic demand than they currently do.

Since 1980, demand has averaged 15.87 million bpd, while capacity has averaged 17.51 million bpd. If there is a relationship between imports of refined products, domestic capacity and national security, then our national security was in far more jeopardy before 1980 than it is today.

(B) GIVEN THE CURRENT TRENDS IN CAPACITY, WHEN WILL WE REACH THAT POINT?

As I said earlier, I do not know when or at what point the level of refining capacity becomes a problem from an energy security standpoint. I think that may well depend on how one defines energy security. Given the current trend toward an increase in downstream capacity, our position may be improving, not worsening.

(5) (A) DO YOU BELIEVE THAT FOREIGN COUNTRIES ARE SUBSIDIZING THEIR REFINERIES INDICATED IN THE MAY 1985 ITC STUDY.

The ITC study does not conclude that all foreign governments are subsidizing their refineries. This is important because the study only analyzes five countries. Since public concern is really over OPEC export refineries, I will explain the findings of the ITC relative to Saudi Arabia.

Page 87 of the ITC study presents a netback analysis to determine the price of Saudi crude oil, which they determine is $28.35 a barrel. The study then states that, "The difference between $28.35 and the true Saudi cost would be the amount of price advantage enjoyed by Saudi refiners when compared with U.S. refiners." They do not determine the true cost of Saudi crude. It could simply be that Saudi officials sell the crude oil to their refiners at spot market prices or at official OPEC prices. What is apparent is that even if the Saudi's did sell the crude oil to themselves at the official OPEC price, their products would still be competitive in world markets. This is the conclusion of the ITC study. Again from page 87, "However, it is probable that Saudi produced petroleum products would be price competitive in the international marketplace regardless of domestic feedstock and fuel cost advantages."

Many will argue that the true Saudi cost is the cost of production, which the ITC study states is between $3 - $6 a barrel. Following that line of logic, it can also be argued that vertically integrated American oil companies subsidize their refining operations. This is something that independent, non-integrated refiners have claimed for some time. According to the EIA's Financial Reporting Service, the cost to the FRS companies of producing oil was $7.37 per barrel in 1983. Following the logic of the ITC study, this means that the difference between $7.37 per barrel and the U.S. refiners acquisition cost of crude oil, $28.99 in 1983, is the amount by which the major oil companies subsidize their refining operations.

If one accepts this reasoning, then a whole new series of questions is opened up. It translates into saying that while the Saudis subsidize their refineries, they are simply following the practice of the major American oil companies, which for years have been subsidizing their own downstream operations. The major oil companies and many economists would not accept this line of reasoning.

In the first place, by selling the crude oil to themselves lower than what they could sell it for on the outside market, they lose money. They forego the profits that they could have earned if the oil was sold to a third party. Some persons have argued that refining is a way of getting around OPEC's quotas on crude oil, and therefore, that the Saudis would sell themselves the oil at any price to simply increase revenues. Again, this has the effect of lowering the future stream of earnings from Saudi oil. That's something I don't believe the Saudis are ready to do. Kuwait has the same problem. Attachment IV presents excerpts from Saltan Nadar's speech regarding this issue and the Kuwait Petroleum Corporation.

There are some other problems with the ITC study. For example, the study uses the domestic prices of refined products to determine a netback cost of crude to the foreign refiners. In some instances, Mexico for example, the price of domestic refined products is lower than the cost of producing these products, if the official Mexican crude oil price is used. This leads ITC to conclude that Mexican refiners receive crude oil at lower than official prices. Simply because the Mexican government chooses to subsidize domestic energy consumption does not mean that they sell crude oil from their refineries at lower than official prices. To do so would give refiners incorrect signals. Regardless of whether they subsidize domestic refined product prices at the retail level or not, they would still want their refineries to be as efficient as possible and that requires correct input price signals.

(B) DO YOU BELIEVE THAT FOREIGN REFINERS ARE USING THIS SUBSIDY TO COMPETE UNFAIRLY?

As mentioned previously, PMAA has problems with the ITC's definition of subsidization. To accept this definition would mean to accept the subsidization of some U.S. refineries by their major oil company owners. Even if we did accept this definition, the study examined only five countries and did not conclude that all five countries were subsidizing. So it is quite ambiguous to ask if refiners are using this subsidy to compete unfairly.

(C) WHAT, IF ANYTHING, SHOULD THE GOVERNMENT DO TO PREVENT THESE SUBSIDIES FROM ADVERSELY AFFECTING OUR PETROLEUM INDUSTRY? WHAT WOULD BE THE COSTS AND BENEFITS OF SUCH PROTECTION?

As previously stated, it is uncertain which countries, if any, are subsidizing their refined products and whether this subsidization results in unfair competition. The U.S. refiners have always wanted some form of protection. It raises their profits and shields them from competition. The argument against importing crude oil was used during the Eisenhower Administration and resulted in the Mandatory Oil Imports Program which kept the price of domestic crude higher than the world price of oil. When circumstances changed, refiners argued for protection and we got the Crude Oil Entitlements Program which resulted in massive transfers of wealth to refiners and to OPEC nations. In short, every time protection is granted, the consumer, as well as other segments of industry, are the ones who pay for it. As petroleum marketers, we do not believe a sufficient case has been made to impose import restrictions which might raise consumer prices and damage other segments of the petroleum industry.

(6) IN YOUR OPINION, WHAT WILL HAPPEN TO U.S. REFINING MARGINS AND U.S. REFINERS WHEN THE EXPORT REFINERIES UNDER CONSTRUCTION IN THE PERSIAN GULF COUNTRIES AND ELSEWHERE GO INTO OPERATION?

I believe that will depend upon what trade barriers exist in other nations which are the target destinations of the products from these refiners. It also depends upon the efficiency of the U.S. domestic refiner and what happens to capacity elsewhere.

(7) AT WHAT POINT WILL THE SHUT DOWN ON U.S. REFINERIES THREATEN THE USE OF THE STRATEGIC PETROLEUM RESERVE OIL?

PMAA does not feel qualified to answer this question. That is a matter for the Secretary of Energy to determine. We do know that there is still sufficient capacity in that area of the country and that other problems plague the use of SPR more than does the shut down of these inefficient refineries. In the case of an emergency, we may need to squeeze every drop of precious fluid from a barrel of SPR oil and these closed refineries are simply too inefficient to trust to that purpose.

(8) WHAT IS YOUR ASSESSMENT OF THE (FOLLOWING QUOTE FROM) THE EAST-WEST CENTER REPORT, WHICH THE DEPARTMENT OF ENERGY COMMISSIONED, CONCLUDED THAT:..

If the scenario painted by the above referenced statement ever materializes, then some action may be needed. Now, however, is not the time. A review of the refining industry's financial performance in the second quarter of 1985 reveals that their profits have increased significantly over last year and the first quarter of this year.

If it ever becomes necessary to protect the efficient refiner, we hope that this protection will not extend to the inefficient refiner as well. That would unnecessarily raise prices and waste valuable energy resources by promoting inefficiency.

(9) WHAT IS YOUR ASSESSMENT OF THE STATEMENT - THE EAST-WEST CENTER REPORT ALSO NOTED THAT WHEN SURPLUS REFINING CAPACITY IS ELIMINATED, A NEW KIND OF SECURITY RISK COULD EMERGE.

Again, if this scenario emerges, action may be necessary. That time is not now. The world has plenty of excess refining capacity and I believe that will continue for some time.

(10) WHAT IS YOU ASSESSMENT OF (SECRETARY BOGGS's) STATEMENT?

We could not agree more with Secretary Boggs. We are told that the bulk of excess crude oil production capacity is in the Persian Gulf. We agree that the exclusion of refined products would mean greater imports of oil, and this oil will have to come from Persian Gulf nations.

(11) HOW HIGH WOULD AN IMPORT FEE HAVE TO BE TO MAKE THE U.S. REFINING INDUSTRY COMPETITIVE?

This question does not differentiate between the efficient refiner and the inefficient one. It also assumes that imports are the root problem in the deterioration of the domestic refiner. THIS JUST IS NOT THE CASE. The major causes of the refining restructuring are the decline in demand of petroleum products and the end of government programs which subsidize refining.

As mentioned above, this country must import petroleum and/or petroleum products. Last year, Americans consumed on average 15.7 million barrels of petroleum products per day. Of this total, 1.979 million bpd or 12.6 percent were imported as refined petroleum products. Another 3.402 million bpd were imported as crude oil.

It is quite evident that this country depends less on foreign petroleum than during the 1970s. During the 1960s, imports from OPEC nations accounted for an average of 11.6% of total consumption. During the 1970s OPEC imports accounted for 21.5% of consumption. In 1984, only 12.8% of consumption was supported by imports from OPEC nations. Imports from Arab OPEC nations accounted for 5.1% of consumption last year as opposed to an average of 9.1% during the 1970s. Table 2 shows imports only by selected country.

TABLE 2
IMPORTS OF CRUDE OIL AND REFINED PRODUCTS
BY SELECTED AREA OR COUNTRY
(000's BPD)

	ARAB OPEC	CANADA	MEXICO	TOTAL NON OPEC	TOTAL IMPORTS
1973	915	1,325	16	3,263	6,256
1974	752	1,070	8	2,832	6,112
1975	1,383	846	71	2,454	6,056
1976	2,424	599	87	2,247	7,313
1977	3,185	517	179	2,614	8,807
1978	2,963	467	318	2,613	8,363
1979	3,056	538	439	2,819	8,456
1980	2,551	455	533	2,609	6,909
1981	1,848	447	522	2,672	5,996
1982	854	482	685	2,968	5,113
1983	632	547	826	3,189	5,051
1984	809	629	739	3,358	5,381

In 1984 net imports of refined products were 9.2% of total consumption. While this does represent an increase from 1983, it is far below those levels established in the 1970s. As total net imports decrease in their importance of satisfying domestic demand, the relative mix of imports has shifted. In the early 1970s, imports comprised over 60% of residual fuel oil consumption, whereas gasoline imports accounted for between 1.9% and 3.1%. In 1984, imports of residual fuel oil satisfied less than 50% of total resid consumption and gasoline imports accounted for 4.4% of domestic consumption. (See Table 3.)

TABLE 3
IMPORTS OF SELECTED PRODUCTS
AS A PERCENT OF TOTAL PRODUCT CONSUMPTION

	FINISHED MOTOR GASOLINE	DISTILLATE FUEL OIL	RESIDUAL FUEL OIL	JET FUEL	LPG	ALL OTHER PRODUCT
1973	2.0	12.7	65.7	20.0	9.1	13.1
1974	3.1	9.8	60.1	16.4	8.7	12.6
1975	2.8	5.4	49.7	13.3	8.4	7.2
1976	1.9	4.7	50.5	7.7	9.3	5.9
1977	3.0	7.5	44.3	7.2	11.3	5.5
1978	2.6	5.0	44.7	8.1	8.7	3.2
1979	2.6	5.8	40.8	7.2	13.6	4.4
1980	2.1	5.0	37.4	7.5	14.7	5.1
1981	2.4	6.1	38.3	3.8	16.6	9.0
1982	3.0	3.5	45.1	2.9	12.2	16.3
1983	3.7	6.5	49.2	2.8	12.6	19.6
1984	4.4	9.5	49.6	4.8	12.3	24.0

Imports have not been the problem, so we should not be looking at increasing tariffs or imposing quotas as a method of helping the domestic refiner.

(12) SINCE MOST OF OUR IMPORTS OF REFINED PETROLEUM PRODUCTS ARE FROM GOVERNMENT SUBSIDIZED FACILITIES, WOULDN'T THESE GOVERNMENTS JUST INCREASE THEIR SUBSIDIES TO RETAIN THEIR SHARE OF THE U.S. MARKET?

The facts indicate that in 1984 about 64 percent of the imported refined products came from only eight countries, none of which have been indicated as subsidizing their refineries. These countries in order of imports are: Venezuela, U.S. Virgin Islands, Canada, Netherlands Antilles, Bahamas, Netherlands, and the United Kingdom.

(13) IS THERE ANY WAY TO HELP OUR AILING DOMESTIC REFINING INDUSTRY OTHER THAN IMPORT FEES OR QUOTAS?

The industry was ailing for a number of reasons unassociated with imports. Even in the absence of imports, many domestic refiners would have closed. We would be interested in participating in any forum to respond to this question in a more direct manner.

(14) WOULD YOU PREFER A QUOTA OR AN IMPORT FEE?

At this point I believe both are inappropriate. Whether a fee or a quota is imposed the net result is the same- sources of supply will be limited and prices will rise.

(15) HOW WOULD WE DETERMINE AN APPROPRIATE QUOTA LEVEL, AND WHAT IS YOUR ESTIMATE OF WHAT AN EFFECTIVE QUOTA LEVEL IS?

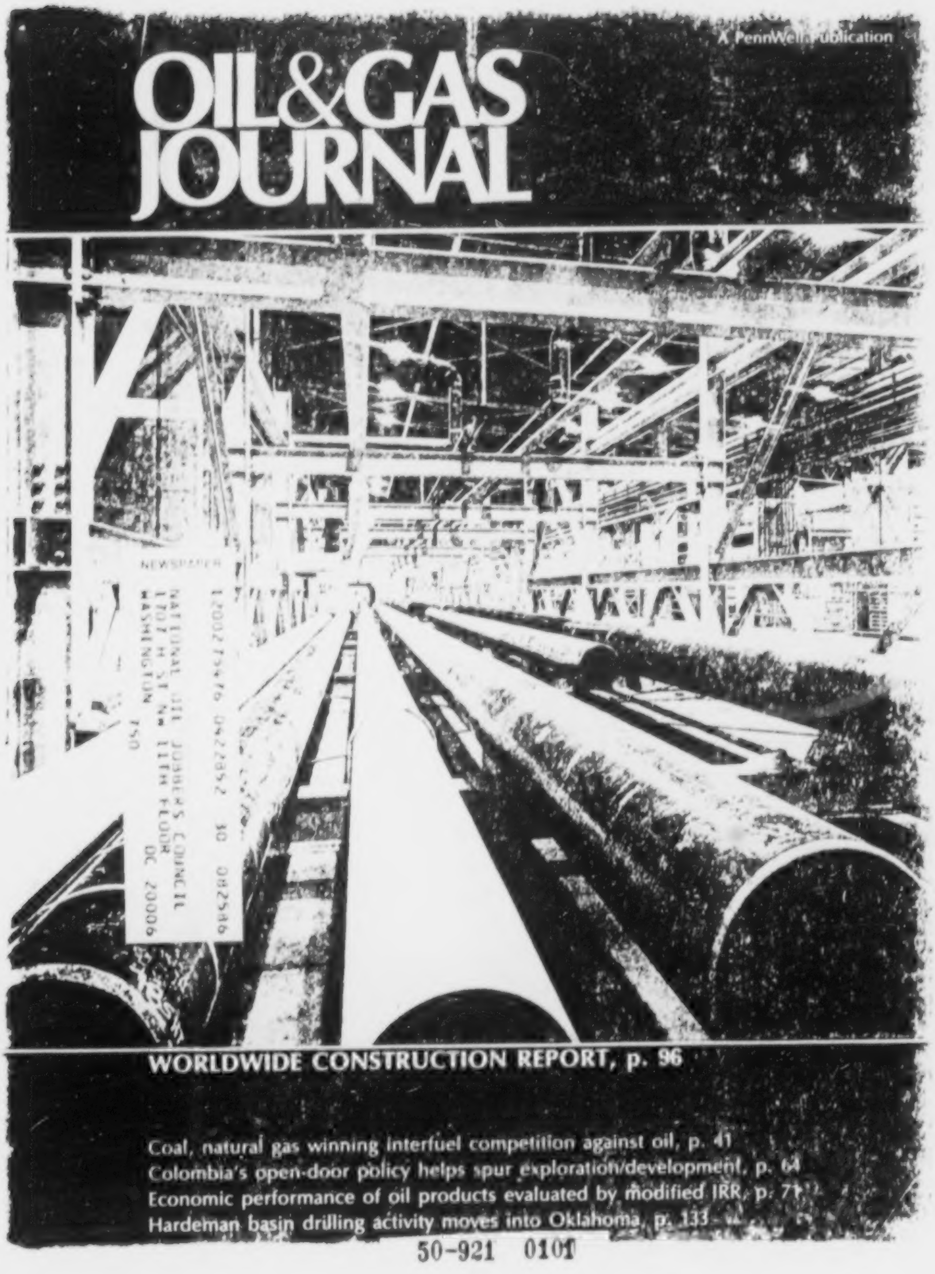
This is a difficult question for PMAA to respond to since we do not accept the premise that a quota is needed.

Again, thank you for the opportunity to respond to the subcommittee's questions regarding imports and domestic refining.

Sincerely,

Phillip R Chisholm for
Jack Griffith
Jack Griffith
Immediate Past President
Petroleum Marketers Association
of America

MA/JG:kj



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Worldwide Construction

Aileen Cantrell
Director of Editorial Surveys

Major construction projects in worldwide processing and pipelining, showing capacities, contractors, estimated costs, and time of completion. Total capacity figure in "Remarks & completion" column includes capacity of project listed. Where no such figure is given, project listed is a new unit.

Refineries—WORLDWIDE CONSTRUCTION

*Designates projects listed for the first time in the Journal

Company and location	Project	Capacity (b/d)	Remarks & completion
	UNITED STATES		
American Petrofina—Port Arthur	Hydrotreat	5,000	30,000 total cap. Feed pretreat. Foster Wheeler on all units. Mid 1985
	Isom [illegible]	8,000	Mid 1985
Amoco Oil—Texas City, Tex.	Isom	22,000	C_5/C_6 feed. Eng design: Pritchard. 1985
	Alky	23,500	Eng: Fluor. Const: Brown & Root. 1986
Whiting	Isom	11,500	1985
*Arco Petroleum Prod.—Carson, Calif.	Hydrotreat	70,000	Gas oil. Braun. 1986
Ferndale, Wash.	Coke calc.	1,200 t/d	Under Const. Bechtel. 1986
Conoco—Lake Charles, La.	Coke calc.	822 t/d	Conoco & Bechtel. 1986
	Hydrotreat	11,500	Resid desulf. $8 MM. Eng stage: Braun. Mid 1985
Ponca City, Okla.	Hydrotreat	10,000	FCC feed. $11 MM. Eng stage: Braun. 1985
Exxon USA—Baytown, Tex.	Vac	80,000	288,000 total cap. Brown & Root. 1987
	Flexicoker	25,000	Resid upgrade. Foster Wheeler. 1987
*Kendall Amalie (Witco)—Bradford, Pa.	Crude	10,000	Howe-Baker. 1985
	Hydrotreat	253	2,553 total cap. Cat reform feed pretreat
	Lube (dewax)	3,950	6,990 total cap. Eng. stage. Summer 1986
Koch Refining—Corpus Christi, Tex.	FCC	10,500	40,000 total cap. Eng: Foster Wheeler. Const: Bay. May 1985
	HF alky	2,500	8,500 total cap. Eng: UOP. Eng design: Ford, Bacon & Davis. May 1985
Mapco—North Pole	Crude	45,000	91,700 total cap. Nov. 1985
	Arom extract	14,180	From naphtha. Nov. 1985
	Arom-BTX	3,000	
*Marathon Petroleum Co.—Garyville, La.	Hydrotreat	12,000	LSR HDT and isom unit. Planned
Robinson, Ill.	Hydrotreat	10,500	LSR HDT and isom unit. Planned. Convert reformer
*Placid Refining—Port Allen, La.	Cat reform	8,000	10,000 total cap. Mid 1986
	Hydrotreat	8,000	10,000 total cap. Mid 1986
Provident Energy Co.—Mobile, Ala.	New ref.	60,000	Con: Foster Wheeler. $550 MM. 1987
	Vac	25,500	
	Delay coking	11,000	
	Cat reform	30,000	Contin bimetal. UOP
	Hydrocrack	25,400	Gas oil. Union Oil
	Hydrotreat	10,200	Feed pretreat
	Hydrogen MMcfd	36.0	Steam meth reforming
	Coke	526 t/d	
	Asphalt	10,000	Alternate oper. to process vac bottoms in delay coker
*Seagull Refining—Roosevelt, Utah	Cat reform	1,500	Semi-bimetal. Aug. 1985
*Tesoro Petroleum Corp.—Kenai, Alaska	Crude	27,500	76,000 total cap. Litwin Eng. Sept. 1985
	Hydrogen	12.8 MMcfd	
*Total Petroleum Inc.—Alma, Mich.	Hydrotreat	500	2,000 total cap. M dist. Sept. 1985
*Union Oil Co. of Calif.—Lemont, Ill.	HF alky	16,000	Fluor. $35 MM. Late 1985
	ABU DHABI		
Abu Dhabi National Oil—Ruwais	Vac	46,000	Under const. Snamprogetti on both units. Mid 1985
	Hycrack	27,000	Dist. upgrade. Under const.
	AJMAN		
Ajman Saudi Refining Co.—Ajman	Refinery	200,000	Transport and reassembly of former Esso Milford Haven refinery. Dismantle, mark, ship: Ventech International. Operational 1987

APPENDIX II

Additional Statements for the Record

Testimony
of
L. D. Thomas
President, Amoco Oil Company
Submitted to the
Senate Energy Subcommittee
on
Energy Conservation & Regulation
June 4, 1985

On behalf of Amoco Oil Company, I am pleased with the opportunity to provide our thoughts on the current situation in the refining industry to this Committee.

During and after the 1973-74 Arab Oil Embargo, the U.S oil industry was often emotionally criticized for not having foreseen an unprecedented supply disruption and prevented it -- or at least reduced its impact. By contrast, this hearing is a recognition that a strong private sector refining industry is a vital part of the nation's total energy security. Amoco welcomes the change in perception and is happy to contribute to your analysis of this most important issue.

I would like to begin by focusing on actions and investments which refiners have taken that benefit the U.S. supply security of crude oil and products. Then I'll turn to some problems that could return the country to greater vulnerability and to supply disruptions.

Although the U.S. has seen some serious threats to supply in the past ten years, today, we face no shortages of either crude oil or products. But we haven't by any means solved the problems of continuing dependence on foreign energy.

As a realist, I believe that we can view the present adequate supplies and lower prices as a breathing space at best. But as an optimist, I believe we can capitalize on this breathing space and examine:

A) the impact of the Embargo and its aftermath;

B) the strategic steps we have taken to reduce our dependency;

and C) what we can do in the future to enhance our future energy security.

From World War II to 1973, the U.S. oil companies largely owned and produced the world's crude oil. The involvement by host governments or by the U.S. government was relatively small.

The market for petroleum products was characterized by extreme competition. Service station dealers attracted customers not only with different grades of gasolines but with premiums like green stamps, or glassware, or free road maps. "Gas wars" or price wars were a common occurrence.

Petroleum products were among the best bargains in the economy. From the middle 1950s through 1973, the price of gasoline slowly but steadily declined in real terms.

The favorable market conditions created by the private sector began to change with the involvement of various governments in the early 1970s. At first governmental involvement took the form of tougher stands in crude price negotiations. Gradually a willingness to use oil as a foreign policy weapon emerged. Ultimately, the idea of an Embargo passed from a threat to a reality. As it did so, the decisions of foreign governments were substituted for those of U.S. companies and the free market.

When the control by foreign governments over U.S. energy was made explicit during the Embargo, the domestic psychological impact was incredible.

Congress and the Administration came under tremendous pressure. They thought they had to do something -- so they did. Unfortunately, instead of protecting the market from the cartel, they tried to protect the consumer from what would have been a short-term market aberration. In so doing, they made it a long-term aberration by replacing the market with a regulatory system of price controls, supply allocations bad economics... and good intentions.

Ultimately, these regulations and intentions grew to 29 volumes totaling more than 80,000 pages.

The tragedy, however, is not that whole forests laid down their lives so these rules could be printed.

The tragedy is that the regulations prevented the restoration of the balance between seller and buyer for years. In doing so, they probably did more to prop up OPEC prices than anything the Cartel could have done on its own.

Everybody on the Committee remembers the reports of the semi-annual OPEC meetings in Vienna. The oil ministers from the different countries would assemble ... debate ... and then announce the price customers would pay for the next six months. There was no input from the OPEC customers. Most importantly, the U.S. was regarded by OPEC as a captive market.

Although energy independence was the stated goal of U.S. regulations, those regulations did nothing to change U.S. consumption patterns -- and nothing to reduce imports. In fact, gasoline consumption and crude oil imports actually increased during the 1973-79 period.

Ultimately, however, the market prevailed. OPEC prices encouraged new drilling activity in non-OPEC areas. Alaskan, Mexican, and North Sea production came onstream faster than they would have otherwise.

To offset the anti-conservation impact of low prices, Congress legislated conservation tax incentives, mandated mileage requirements, and imposed stricter energy saving standards for new construction. But most importantly, gradual and then final governmental Deregulation of crude oil and gasoline prices led to more rational pricing and allocation decisions by consumers.

All of these events diluted OPEC's power and restored the voice of buyers to the marketplace. But that voice could have been restored sooner if the U.S. government had recognized the role of the private sector and the free market in bringing consumers the products they needed. That recognition was long in coming.

The logical movement toward Crude Oil and Product Decontrol and the logic of other pro-supply steps met with consistent and emotional opposition.

The clearest example of the opposition to the pro-supply strategy concerned the long industry campaign to build the Trans-Alaskan Pipeline.

The oil industry officially added ten billion barrels of oil in Alaska to U.S. reserves in 1969. But it took five years of environmental squabbling, an Oil Embargo, and an Act of Congress to even start work on the pipeline. And then it took three more years of construction to finish it -- and a total private sector investment of nearly nine billion dollars.

But consider the value of that investment to domestic supplies: Since the line came onstream, it has brought about four billion barrels of oil to the U.S. Considering the cost of the foreign barrels it replaced, the pipeline has saved $110 billion that would have otherwise gone to prop up OPEC prices outside the U.S. Last year alone, the absence of the line would have added $20 billion to our record Balance of Trade deficit.

While there is nobody who would now want to forego results such as these, initial opposition to the Trans-Alaskan Pipeline was tremendous. In fact, the line was built at a time when there were proposals in Congress to dismember the 18 largest oil companies. Yet today, we can all see the strategic benefits of a strong private sector devoting its resources to preserving and enhancing usable energy supplies.

The country has also benefitted from the massive investment in the refining end of the industry. At the time of the Embargo, the U.S. refining industry was primarily designed to handle light, low-sulfur crudes. During the Embargo some heavy, high-sulfur crudes were available but not acceptable because of the design of the refining system.

In the five years since Deregulation of domestic crude prices the refining industry has spent $19.1 billion to upgrade its refineries to handle a wide variety of different crude oils. Today, thanks to those investments, the U.S. industry is flexible enough to make a slate of high quality refined products from just about any crude oil available.

As a result, the petroleum industry has been able to process lower-grade Alaskan crudes and dilute OPEC's influence over the domestic industry. As more and more of the programs designed and begun two to three years ago come onstream, that result will be still more pronounced.

I make that point explicitly, because even though industry-favored policies have brought us our present breathing space, they haven't brought us total future security. The U.S. marketplace itself isn't completely out of danger.

OPEC countries see they have lost the leverage they once had over the marketplace. They would like to regain it. Given the present crude glut -- in which OPEC's free-world market share has fallen from about 60 percent to about 35 percent -- there seems to be an effort to concentrate on downstream -- or refining -- gains. Cash-rich OPEC countries are building EXPORT refineries at a time when about one/fourth of world-wide refining capacity is going unused.

Such a move is logical for a number of reasons:

One, it would provide product diversification for a crude-oriented economy.

Two, building, and to some extent, operating refineries would provide jobs by refining the crude where it's produced.

Three, it would add value to a potential plant fuel like natural gas which presently has no value where it's produced. Right now, it's frequently flared or re-injected into the well formations.

Four, it would permit countries trapped by quota agreements to disguise overproduction or cut-rate pricing with product sales.

And five, it's not completely cynical to think they might manipulate product prices to replace the political power they have lost over crude oil supplies.

But whatever reasons might motivate a country to integrate downstream for product exports, we should also consider what would motivate against such investment. Traditional economic logic for exporting to existing markets calls for markets characterized by:

A) A price/value differential -- like the one that made the U.S. auto market attractive.

B) Antiquated plants or high-cost labor -- conditions that made the steel industry vulnerable.

C) Inability to meet needs from domestic production -- as is the case with some minerals.

But the U.S. market for refined product is not characterized by any of those traditional criteria:

A) There is no significant price/value differential in refined petroleum products. The average wholesale gasoline price dropped from $1.04 at Decontrol in 1981 to about 78 cents a gallon today. Instead of dropping, if the wholesale gasoline price had merely matched inflation, it would be at $1.30 today which would mean you would pay about $1.75 at the pump.

B) Our product market is not characterized by antiquated plants: As I mentioned, refiners have upgraded their facilities with $19.1 billion in investment. Amoco alone has spent about $1.5 billion.

C) There is no shortage of domestic facilities. Product demand decreased between 1979 and 1983. Over one hundred refineries have closed and the remainder are still operating at only about 75 to 78 percent of capacity.

D) Finally, most companies have shrunk their marketing areas to those where they have some transportation or other edge that will make them more competitive than ever.

These are not the conditions that tempt a businessman to go half way around the world to compete. And I don't think a businessman would do so if he expected to:

pay the same taxes;
AND pay the going price for crude oil and plant fuel;
AND make a return to shareholders;
AND meet the same environmental restrictions;
AND pay the same shipping costs.

But I'm not sure we can expect the same behavior from sovereign governments which own the resources of their countries that we can from independent businessmen. In other commodities, we see government ownership has led to policies based on currency needs, or domestic employment policies -- at the expense of rational pricing behavior abroad. There are international treaties against the more extreme forms of these policies.

Would OPEC governments make anti-marketplace decisions about products that follow government patterns in pricing other commodities?

Point number one, I guess, is that they have manipulated crude oil prices for the last 12 years to the extent they could. I don't know why they would do differently with refined product.

Point two is the international refining situation today:

4 to 4.5 million barrels a day of excess capacity in Europe;
2 million in the U.S.;
1.5 to 2 million in Japan;
another 2 million a day in places like Singapore and the Caribbean;
Or 10 to 12 million barrels of excess capacity in all.

It would take very special justification for any private sector businessman to justify massive construction programs for new capacity under these conditions. For example, it would take an enormous increase in projected demand. But projected demand growth among industrialized and Third World countries is not expected to exceed 4 to 5 million barrels by 1990. And yet, OPEC countries -- in the face of 10 to 12 million barrels of excess capacity -- are adding another 2.5 million barrels to their systems.

If traditional economic logic won't justify this investment, then what does justify it?

Possibly a low cost structure based on low transfer prices of raw materials and plant fuels. Possibly state of the art refineries. Possibly low-cost labor. Maybe different Governmental restrictions: they have no EPA restrictions; no Jones Act for shipping to American ports; and none of the Crude Oil Equalization Taxes and the like enacted since the Embargo.

Why would foreign production come to the U.S. as opposed to other importing countries?

Two reasons: One, we have about one/third of the world's oil demand here -- and, two, we have the world's soundest currency. Nobody else offers this combination of market and money.

Third World countries would be considerably less attractive trading partners. Places like Japan and some European countries which restrict imports would be less attractive still. Unless we can work out some arrangement for other countries -- such as Japan -- to take their fair share of the increasing product exports, U.S. refiners will receive an unfairly heavy impact in competition in domestic markets.

Foreign competitors would have other advantages too: For example, U.S. refining hasn't been able to earn a satisfactory return on investment for several years. As I mentioned, utilization rates are well below profitable levels.

In addition, foreign competitors would have an advantage with plant fuel -- the largest refinery cost after crude oil itself. Amoco is one of the largest refiners in the U.S. In 1983 our bill for plant fuel came to over $700 million -- or about five times our operating profit that year.

If otherwise unused natural gas could be diverted to plant fuel at its Persian Gulf value, it would be difficult for any U.S. refiner to compete.

In other words, whatever OPEC's rationale in building unnecessary refineries, they have the resources to make them successful -- even if that requires subsidization through a protracted price war.

I have dwelled on the dangers to the U.S. refining system because I think there are definite strategic issues at stake.

First of all, the U.S. possesses a great many world-class refineries. From the standpoint of high-valued gasoline and diesel-fuel products, even our poorer refineries are better than many good ones elsewhere.

As I mentioned, our system has been upgraded by tremendous expenditures to be able to deliver products to U.S. customers from any crude oil available. This system would be jeopardized.

Second, our Strategic Petroleum Reserve now has nearly 500 million barrels of crude oil. It was built on the assumption that we would have a strong refining sector to process that crude in an emergency. A weakened U.S. refinery system would negate much of that SPR advantage -- and in fact, in view of recent closings, the U.S. system is already down to minimal projections for utilizing SPR oil efficiently.

If there were product embargo -- and if the U.S. wanted to maintain a consistent 16 MMB/D which we are currently using -- we would need to have about 15 MMB/D of capacity operating at 90 percent. We're almost down to that now. We opened 1985 with industry refinery capacity reported optimistically at 16.1 MMB/D. Now that's down to 15.6 MMB/D. And we expect it to be at 14.9 by the end of this year. Continued refinery closings could result in insufficient U.S. capacity for processing SPR crudes.

The third strategic issue is that domestic refineries mean security of product supply. Middle Eastern refineries would be within easy reach of terrorists and suicide squads.

Fourth, our supply lines -- as distinguished from supplies -- are here. In World War II, we diverted effort from the War to build product lines onshore because German U-boats were sinking coastal tankers. Today, there would be less problem defending our own coasts. But the tactical and strategic problems in defending supply lines stretching from Persian Gulf refinery gates would require an enormous commitment. I don't see Congress or the Administration ready to make that commitment -- and without it, how could we begin to justify product dependency as an acceptable policy?

Is there a real present threat to the U.S. refining industry?

Yes there is. It comes from a variety of sources. One danger is that the tariff on imported gasoline was set at 1.25 cents a gallon in the 1950s when the wholesale price of gasoline was about 10 cents a gallon. The tariff is still 1.25 cents a gallon today although the wholesale price now is 78 cents a gallon. In fact, the tariff for importing gasoline to the U.S. is one of the few things that costs what it did 25 years ago.

That small tariff,
plus higher labor costs
plus the strong U.S. dollar,
plus our demand for high octane gasolines,
plus the low profitability of today's U.S. refineries,
plus the taxes and regulatory costs domestic refiners face,
add up to a real problem for U.S. refiners.

There are other problems too: For example, some gasoline components can be imported as part of gasoline more cheaply than they could come in on their own. That's a real problem because the gasoline market bears the whole burden of the unintended loophole.

For example, ethanol used in gasoline can now come into the country as a "gasoline component" 59 cents a gallon more cheaply than it could if it entered classed as "ethanol." And it does so.

The problem is real because once in the market, ethanol blends are sold with reduced federal taxes -- and in thirty or so states with reduced state taxes. As a result, they just crowd out domestically refined and fully taxed gallons -- and reduce state and federal revenues.

Refiners are not the only parties to see these problems: The International Trade Commission in April of 1985 affirmed by a vote of 5 to 0 that there is "a reasonable indication of threat of injury" to the domestic refining industry from imported petroleum products.

Further, the ITC has asked the Department of Commerce to investigate the problem and has also begun its own studies on the abuse of the ethanol differential for gasoline blendstocks. Senator Dole has expressed the feeling that such ethanol ought to pay the full ethanol tariff. On the other side, nobody has suggested that the U.S. ought to be subsidizing foreign ethanol producers.

Some observers believe we could control product dependence by restoring the import tariff to its original value relative to the wholesale price of gasoline. While Amoco is not prepared to endorse such proposals either in principle or in specific detail, we do see parties interested in maintaining a strong U.S. refining industry coalescing around such legislation.

We have also noticed recent public opinion surveys which show that people are concerned about becoming increasingly dependent on foreign suppliers for petroleum product -- and are actually willing to pay a premium to preserve or enhance domestic sufficiency especially in vital national security areas.

The U.S. government can't do anything more strategic than provide incentives for more producers, refiners, transporters, and marketers to stay in the marketplace. Permission to OPEC product exporters to import to the U.S. at will may look like it's providing that incentive. But it isn't.

In reality, it's a shortsighted and destructive policy that will permit OPEC to use our market to regain its previous energy supply dominance.

If we don't find a way to monitor and control our imports, we'll see one of two scenarios: Either U.S. refiners will keep their prices down to the point where they would ultimately go out of business. Or they will raise prices to cover their costs and thereby make the U.S. that much more attractive a market for exporting countries. And ultimately our refineries will go out of business.

Whatever defense strategy we decide on to preserve our refining self sufficiency, we should send a clear signal to OPEC -- and to our allies -- that we know a threat to our security when we see one. And a signal that we will not allow a vital industry to wither away while the U.S. becomes the temporary dumping ground for subsidized petroleum products -- and a long-term target for manipulated petroleum product prices.

As I said, we are in a breathing space. It won't last forever. Each day we postpone the decision, we encourage OPEC product exporters that much more. We have nothing to gain by raising their expectations.

Within the memory of everyone on this committee, the U.S. has been at OPEC's mercy twice: In 1973-74, they quadrupled prices. In 1979-80, they doubled prices. In neither case were they primarily concerned about the damage they would do to either the U.S. or to world economies.

Twice is enough.

As the result of those pricing actions, we saw the effectiveness of the U.S. foreign policy threatened. We saw the U.S. oil industry saddled with needless and counter-productive controls from the wellhead to the gas tank. And we saw the U.S. marketplace subject to price dictation by a foreign, anti-market cartel.

By contrast, during the time since Decontrol, we have seen the U.S. industry invest aggressively and prudently in its refineries -- and in conjunction with the Strategic Petroleum Reserve greatly enhance U.S. product supply security. And we have seen record breaking years in private capital expenditures on frontiers of new technology and frontier areas of exploration.

From a strategic standpoint, we can choose between a vital U.S. industry investing in secure domestic crude and product supplies. Or we can allow a myopic view of today's energy surplus to lull us back to greater foreign dependency.

Personally, I don't believe this is the time to put U.S. refined product supplies in the hands of Middle Eastern product exporters. Thankfully, there is no need to do so.

# # #

EXXON COMPANY, U.S.A. STATEMENT ON PETROLEUM PRODUCT IMPORTS SUBMITTED TO SENATE ENERGY AND NATURAL RESOURCES COMMITTEE, SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION

JUNE 4, 1985

Exxon appreciates the opportunity to offer its comments to the Senate Energy and Natural Resources Subcommittee on Energy Regulation and Conservation regarding the need for added protection for U.S. refiners against petroleum product imports.

We do not see at this time justification for additional tariffs and/or the imposition of quotas or other quantitative restrictions on U.S. petroleum product imports. Overall, we find few tariff barriers prohibiting imports of petroleum products into other major consuming countries. Current levels of U.S. refining capacity do not lend support to arguments that there is a near-term threat to national security.

However, recognizing that circumstances could change, we believe it is appropriate to continue to monitor the product import situation closely. If unfair trade practices are shown to exist at some time in the future, existing U.S. statutes already provide adequate authority for the U.S. government to take offsetting protective measures. No new protective legislation is necessary. We do, however, support adjustments to the existing tariff schedules to remove uneven treatment of motor gasoline blendstocks, and to stop circumvention of existing tariffs on alcohol imported into the U.S. for use in motor fuel.

U.S. Product Imports

As shown in Table I below, current U.S. net product import levels are not high by historical standards. In 1973, net imports represented about 16 percent of demand. This declined to a low of about 7 percent in 1982, and currently accounts for about 9 percent.

Since 1973, there has been a change in the product import mix. In 1973, most product imports were distillates and heavy fuel oil. Today, motor gasoline and gasoline blendstocks represent a more significant share, while distillate imports have declined. Fuel oil imports also have declined, reflecting reduced fuel oil demand for electricity generation and industrial boiler fuel.

TABLE I
NET U.S. PETROLEUM PRODUCT IMPORTS - MILLION B/D

	1973	1982	1984
Motor Gasoline/Blendstocks	0.2	0.2	0.4
Middle Distillates	0.7	0.1	0.3
Fuel Oil	1.8	0.6	0.5
Total Products	2.8	1.1	1.4
% of Demand	16	7	9

Exxon's petroleum product imports as a percent of supply are not significant. In 1984, total net imports were about 6 percent, with negligible imports of finished clean products such as motor gasoline and distillates.

In recent congressional testimony, petroleum product import data on both a gross and net basis have been used. Currently, the U.S. exports about 500 thousand B/D of petroleum products, mostly distillate, heavy fuel oil, and petroleum coke. Most of these exports could be readily converted to domestic use. As a result, we believe net product imports are a more meaningful measure.

Sources of Product Imports

Proponents of import protection tend to link the recent increase in motor gasoline/gasoline blendstock imports and distillate imports with the new Middle Eastern and African refining capacity. Contrary to the concerns being expressed, most of this increase has come from Latin America, not from the Middle Eastern and African (MEAF) refineries.

TABLE II
NET U.S. PETROLEUM PRODUCT IMPORTS - THOUSAND B/D

	Gasoline/Blendstocks		Distillates	
	1982	1984	1982	1984
Latin America	3	106	2	86
Caribbean	81	82	93	111
China/Romania	33	54	-	-
Europe	31	42	(18)	30
Canada	20	17	10	14
MEAF	12	15	-	25
Total	220	370	55	280
% of Demand	3	5	2	7

Net imports of motor gasoline/blendstocks have increased since 1982 from 220 thousand B/D, representing 3 percent of demand, to 370 thousand B/D, or 5 percent of demand in 1984. The U.S. imports motor gasoline from over 20 countries. During 1984, 106 thousand B/D, or nearly 30 percent of the total, came from Latin American sources, principally Venezuela, Brazil, and Mexico. Another 82 thousand B/D, or more than 20 percent, came from refineries owned by U.S. companies located in the Caribbean. Although not major suppliers of the total range of products, China and Romania supplied another 15 percent. MEAF refineries accounted for 15 thousand B/D, or only about 4 percent of the total.

Net distillate imports increased from 55 thousand B/D, representing 2 percent of demand in 1982, to 280 thousand B/D, or 7 percent of demand in 1984. Like motor gasoline, they originate from a variety of sources. The 1982 levels were at an all time low because of warm weather in the U.S. In 1984, on the other hand, distillate imports were required to supplement short U.S. supplies when unusually harsh winter weather early in the year increased demand and significantly curtailed U.S. refinery operations. During 1984, almost 200 thousand B/D, or nearly 70 percent of the total, came from Latin American and Caribbean sources. There were no net imports from MEAF refineries in 1982, and only about 25 thousand B/D during 1984.

Restrictions in Other Importing Countries

We do not believe that the current international tariff structures represent barriers of sufficient significance to justify raising U.S. tariffs. There are few restrictions to regional international flows of petroleum products. The exceptions are typically for a specific product to individual countries; such as finished motor gasoline to Japan and France.

Both Europe and Japan have higher import duties than the U.S. However, the European Community has been waiving the duties from most countries except the U.S., Canada, and most Soviet bloc sources. While the Japanese duty on gasoline appears high relative to that in the U.S., the differential between crude and gasoline tariffs is about the same. Although the Japanese government does not formally prohibit them, informal suasion has resulted in no motor gasoline imports. On the other hand, the low Japanese tariff on naphtha relative to crude has resulted in significant imports of naphtha for petrochemical feedstocks.

In 1984, Japan's net product imports accounted for 15 percent of its total petroleum demand, compared with only about 9 percent for the U.S. In Europe, based on data available for three quarters of 1984, net product imports accounted for 11 percent of total product demand.

National Security Implications

Some have expressed concern that further U.S. refining capacity rationalization could threaten national security. The question of national security may be relevant at some future time, but the current level of U.S. refining capacity and its utilization suggests that it is not an issue at present. Even though capacity has declined by almost 2.5 million B/D from peak levels in 1981, the first year of U.S. price and allocation decontrol, there is still a large surplus. During 1984, U.S. average operable capacity was about 16 million B/D, well above crude run levels in the 12 million B/D range. Average operable refining capacity utilization in 1984 was only 75%.

TABLE III
U.S. REFINING CAPACITY/UTILIZATION

	1981	1984
Avg. Capacity, Million B/D		
Operable	18.3	16.0
Operating	17.1	14.6
Avg. Utilization, %		
Operable	68	75
Operating	73	83

The current refining capacity is well above the level needed to run the combined total of U.S. domestic crude production (8.8 million B/D) and current maximum SPR drawdown (2.3 million B/D) of 11.1 million B/D. Even with further U.S. refining capacity rationalization, there will likely be adequate capacity to run domestic crude production plus the planned maximum SPR drawdown of 4.5 million B/D. Additionally, spare refining capacity in countries tributary to the U.S., such as the Caribbean, as well as in Europe, would provide possible sources of additional product if needed in an emergency.

Legal Remedies

Should circumstances at any time indicate unfair trade practices by foreign country governments or a legitimate threat to U.S. national security, adequate remedial authorities already are available to the President and Congress.

The General Agreement on Tariffs and Trade (GATT) establishes internationally-accepted remedies to protect against unfair trade practices. These principles are incorporated into existing U.S. trade statutes which provide protection against dumping and foreign export subsidies. Imports can be restricted to protect U.S. industries from "serious injury," or the threat of "serious injury" if imports are the cause. Also, imports can be restrained as necessary if national security is threatened. As a result, no new legislation is needed for this purpose.

Disadvantages of Trade Restrictions

Trade restrictions would damage the U.S. economy through increased consumer petroleum prices, higher inflation, lower real GNP, and higher unemployment. Increased product prices would place U.S. industries at a competitive disadvantage in international markets.

Further, trade restrictions could invite reciprocal foreign reaction. The probable outcome is that everyone would lose -- the volume of world trade would decline, leading to even greater losses in economic efficiency and welfare. Resulting lower foreign GNP would affect debt repayment ability.

Technical Corrections to Existing Tariff Schedules

A separate but related issue concerns the tariff treatment of motor gasoline blendstocks and alcohol. Current anomalies in the schedule allow some motor gasoline blendstocks to enter with a duty of 0.25¢/gallon, while finished gasoline enters at 1.25¢/gallon. We believe the addition of a motor fuel blendstock category in the tariff schedule, with the same duty as motor fuel, is an appropriate means of correcting this anomaly.

Further, we believe that tariffs on imported gasoline/alcohol blends should be structured to tax the components of the product -- the gasoline component at the gasoline rate and the alcohol component at the alcohol rate. Today, pure alcohol imported for fuel is subject to a 60¢/gallon duty; whereas alcohol imported in a mixture with gasoline is dutied at the motor fuel rate -- 1.25¢/gallon. As a result, substantial quantities of gasoline/alcohol mixtures are entering the U.S., primarily from Brazil. We believe modification of the Tariff Schedule provisions to impose a duty on gasoline/alcohol mixtures at the applicable component rates is the appropriate means of closing this loophole.

Summary

Exxon does not at this time see a justification for additional tariffs and/or the imposition of quotas or other quantitative restrictions on the importation of petroleum products into the U.S. We suggest continued monitoring of the product import situation to assure that a national security threat does not develop at some time in the future, and to guard against unfair trade practices by foreign country governments. Also, we support adjustments to existing tariff schedules to remove uneven treatment of mogas blendstocks, and to stop circumvention of existing tariffs on alcohol imported into the U.S. for use as motor fuel.

In general, Exxon supports free trade as being the most efficient means of promoting a competitive, economically viable domestic refining industry. Inappropriate or premature use of protective tariffs or quotas to restrict petroleum product imports may invite reciprocal foreign reaction. In addition, protective tariffs or quotas would harm the U.S. economy by increasing consumer prices, increasing inflation, and reducing real GNP.

STATEMENT TO BE
SUBMITTED FOR THE RECORD

BEFORE THE SENATE ENERGY & NATURAL RESOURCES COMMITTEE
SUBCOMMITTEE ON ENERGY REGULATION AND CONSERVATION

ON BEHALF OF
INDEPENDENT GASOLINE MARKETERS COUNCIL

ON
DOMESTIC PETROLEUM IMPORTS

Submitted by

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June 6, 1985

The Independent Gasoline Marketers Council is a trade association of non-branded independent marketers of motor gasoline. Council members import gasoline as well as buy it from domestic refiners. They shop for the best price at the refinery level and then resell to end users on a price competitive basis.

The Council strongly opposes all forms of protection for the domestic petroleum industry including tariffs, quotas, and import fees.

Council members understand that independent refiners are having a hard time, and sympathize with them. The oil industry is a mature, declining industry in which restructuring and shakeout are to be expected. The astonishing price increases of the 70s taught consumers conservation and encouraged them to look to other fuels. At the same time demand was declining in response to price increases new supply was coming on stream in response to the same price increases.

The tremendous impact of the price doubling and redoubling would have been enough to encourage the industry to get itself in trouble by over expanding, but at the same time price was exerting a powerful pull toward expansion, the U.S. government was making matters worse through tax and regulatory incentives to encourage refinery expansion and new crude production. Entitlements rules were modified to make refinery investments attractive, new tax incentives were brought into play, and all the while government forecasters kept predicting ever higher prices, ever higher demand, and a desperate need for new refining capacity.

As a result of these developments too much capacity has been chasing too little demand and profits have suffered.

It should be noted that there is another casualty of this period of government madness, the Synfuels Corporation, which today lacks projects because the market is saying the last thing this country needs is more capacity to produce liquid fuels of any kind. Even though government subsidies are available, the investors have been smart enough to read the market forces.

The pain of shakeout has been felt in the independent marketing sector as well. Over the last five years, tens of thousands of retail stations have closed and the remaining volumes have been concentrated in efficient, self-service units. There has been a substantial shakeout in our own ranks. As you know, some of our colleagues in this sector have asked you for legislative relief. We have not joined that call, believing that the free market coupled with antitrust enforcement will best serve our interests.

In most industries, especially capital intensive industries, cycles of boom and bust relating to over expansion are common and, indeed, are an expected part of the workings of a competitive market. As prices rise, new investment is made to take advantage of the profit opportunities. The newcomers compete for business by lowering prices and putting the squeeze on existing, less efficient plants. For a period of time all the industry loses money but then supply and demand come back into balance and profitability is restored. This cycle is repetitive and healthy because when it works properly, it allows market forces to decide which plants are inefficient and should be retired.

Two elements make the application of this normal business cycle to the oil industry somewhat different. The industry has spent so many years as a ward of government programs and benefits that it cannot believe or accept the fact that it must learn to live in a competitive environment. At the least sign of distress it comes back to the government to ask for protection against competitive pressures. The mandatory oil import quota program and the entitlement program are two examples of this instinct at work.

The other factor which makes this industry different is that many of its largest firms are fully vertically integrated from the wellhead to the retail station. For these integrated firms the quick solution to a shakeout at one level or another is to put pressure on the smaller, non-integrated companies who are either customers or suppliers. In the present shakeout the pressure is on the independent refiners who cannot purchase crude at a fair price.

In any other industry it would be inconceivable that the price of a raw material would remain higher than the price of the finished product for years on end. Market forces would compel the producers of the raw material to drop their price or face an inability to sell. In the oil industry crude prices have stayed higher than finished product prices for an extended period of time. When domestic independent companies such as Ashland lowered their field postings for crude to bring them in line with product prices, their supplies dried up.

What this shows is that the raw material markets in the oil industry are not working and that there are serious competitive problems. There is explicit evidence of market imperfection as well. The documents which have been released in the Long Beach case gives us strong reason to believe that price fixing in crude oil markets still occurs, and that antitrust action against proprietary crude pipelines is long overdue.

To the extent that the independent refiners who have made their case to this Committee are efficient firms in trouble because of crude oil pricing, they deserve help. That help should be:

1. Forcing major companies to divest crude oil holdings, thus opening crude oil markets to independent purchasers;

2. Enforcing the antitrust laws to prevent further concentration of control of crude reserves through mergers, although given the number of recent mergers it may be too late;

3. Repealing the windfall profits tax which allows vertically integrated firms to lower their internal transfer prices thus cutting their tax bill, while independent competitors pay real dollars to the Treasury for the tax.

Instead of addressing these issues the independent refiners have chosen to align themselves with a number of majors who see protection of product prices as a way of shoring up the value of their domestic crude reserves.

The irony is that if products are protected from foreign competition, crude prices will rise and the independent refiners will be in the same fix they are in today.

Because the case that imports are the source of the refiners' problem is so thin, they have argued that they are vital to the national security and therefore deserving of protection. In hearing after hearing they have raised the national security issue while worried members of Congress have asked at what point continued closings of refineries will require drastic legislative action.

After some amount of pious throat clearing the witnesses modestly suggest that the U.S. should have enough capacity to meet all U.S. product demand and that if capacity goes below that level, security is threatened. Translated into plain language they are saying all imports are a threat to the national security and once supply and demand come into balance all existing refining capacity should be protected.

This proposition is absurd. Product imports are much less vulnerable to foreign threats than crude imports. Refineries are distributed over a far wider range of countries than crude oil and the owners of refineries have strong economic incentives to keep them running to cover their fixed costs and to keep them in operating condition. Keeping the country dependent on imported crude by protecting all existing domestic refining capacity would, over the long term, leave us more rather than less reliant on unstable sources of supply inasmuch as the great bulk of future crude reserves are in the Middle East.

Further, during the entire period of the 60s and 70s the United States relied on imports of residual fuel oil and heating oil. This dependence was despite oil import controls. Today, the product likely to be in short supply domestically is unleaded motor gasoline, a product far less important than residual fuel oil which keeps power plants running.

A further ~~word about un~~leaded gasoline is in order. The industry has known for at least the last seven years that lead would have to be taken out of gasoline and that additional octane producing capacity would have to be installed. Despite the knowledge that the change was coming many firms did not install the capacity and for the next three to five years despite refinery over capacity the U.S. will require about 500,000 bbls per day of light products from foreign sources to make up the shortfall. Consumers should not be forced to pay for this planning failure.

When the discussion of what refiners want begins, talk turns to tariffs and quotas. Each of these proposals would raise the price of products without raising the price of crude, thus guaranteeing a refining margin. The issue to consider is that each penny increase on a gallon of gasoline means one billion dollars a year in wealth transfer from the consuming public to the refining sector and, there is general agreement among refiners that a penny or two won't do the trick.

Just how many billions of consumer dollars is this version of national security worth?

Mr. Hall of Ashland thinks seven or eight cents on the gasoline is reasonable, while others will settle for a sliding scale tariff depending on the level of imports.

Should the country pay six or seven billion dollars a year to all the oil companies, including the profitable majors, to make sure that there is enough independent refining capacity to meet all domestic demand? We submit the government could buy quite a bit of spare refining capacity and keep it in excellent working condition for a fraction of that sum. Even better, it could invest in a strategic product reserve which would supplement the existing crude reserve.

But the price increase that a tariff might bring is not the only issue. Ending competition from foreign products will cut off one of the favored avenues for OPEC members cheating on their own cartel. Surely, a policy designed to protect of energy security should not be one that props up OPEC prices.

Finally, we feel that it is outrageous for major companies which have bet the store on mergers, which involve billions in bank debt, to come to Congress and plead for relief from foreign competition. Texaco was a strong proponent of a free market when it was borrowing the money to buy Getty. When the price of crude began to fall, the Getty purchase stopped looking like a smart business decision. Now Texaco has begun a campaign for a government program to protect crude and product prices as a way of saving the situation. To them we say live by the free market sword, die by the free market sword. What is good enough for us is good enough for you.

MOBIL CORPORATION

STATEMENT

Imported Petroleum Products and the Domestic Petroleum Industry

June 14, 1985

Mobil appreciates the opportunity to offer its comments to the Senate Committee on Energy and Natural Resources, Subcommittee on Energy Regulation, concerning the impact of imported petroleum products on the domestic petroleum industry.

Mobil does business in more than one hundred nations, has interests in petroleum refineries in nineteen countries, and has interests in facilities which produce or consume petrochemicals in ten countries. Among these interests are a jointly owned refinery and a jointly owned petrochemical plant in Saudi Arabia.

Mobil opposes protective tariffs and import quotas on refined products and petrochemicals because they are expensive initially and competitively destructive in the longer term. We believe that refined product and petrochemical imports are not the source of our industry problems and that proposals such as those contained in legislation recently introduced in the House of Representatives (H.R. 2451, H.R. 2354 and H.R. 2345) have the potential to create such problems. Unilateral tariff legislation carries the risk of retaliation. To reduce that risk, the Administration has proposed a new round of multinational trade negotiations, and a world consensus to proceed is developing. Mobil believes that is an appropriate forum for addressing the issues of concern to this committee.

It is indisputable that the profitability of the petroleum industry has declined dramatically in the last five years because demand has declined, supplies have increased, and free market forces have turned shortage into surplus. It has been a painful transition, and now some in our industry are claiming that refined product imports are the cause of the industry's problem. They ask for tariffs to insulate the U.S. refiner from foreign competition.

The facts simply do not support that contention. While net U.S. imports (the difference between product imports and exports) are up from the 1982 low, they are still well below historic levels. In 1973, net imports totaled about 2.8 million b/d; in 1984 they were 1.5 million b/d -- 45% smaller. In terms of demand, the 1973 net imports supplied more than 16% of our product requirements; last year they supplied less than 10% -- and for the first 4 months of this year, net imports account for only about 6% of demand.

The product mix has changed. Residual fuel imports have declined dramatically as U.S. consumption dropped, and distillate imports are also down from 1973. Gasoline imports have risen, but a review of the data indicates this cannot be a significant factor in the industry problems. In 1984, finished gasoline imports were 292 TBD; that was up 150 TBD from 1980. To put that increase in perspective, 150 TBD is the gasoline production from two average-sized refineries. Clearly gasoline imports were not the major factor in shutting down literally dozens of refineries with over a million b/d of capacity. Competition from more efficient U.S. refineries has been and still is the major factor in the shakeout of the refining industry.

National security has been cited by some companies as justification for tariff protection. The issue is whether U.S. refinery capacity is now or will be below the level required to meet our needs in an emergency. Clearly there is more than enough capacity today to cover any reasonable product requirement. Today, there is enough capacity in the U.S. and the Virgin Islands to meet our current unrestricted product demand (assuming the crude were available) and still leave 2 million b/d of spare or idle capacity. This is an extreme illustration. In a real emergency, it seems certain that we would continue to receive some imported products and certainly there would be a reduction in domestic consumption. Details of refinery capacity analysis are presented in our supporting statement (attached).

The current rationalization process results from competition among U.S. refiners for a reduced U.S. market and "catch up" of refinery closures which were delayed by subsidies associated with earlier federal regulatory controls. We expect that there will be further refinery shutdowns as part of the current shakeout, but it is highly unlikely that domestic capacity will approach a level that would create a national security concern. Further we expect that U.S. refineries generally will operate at an efficiency level which should prevent significant inroads by imports.

Unfair pricing, particularly as a result of alleged producing country raw material subsidies, is the third problem cited by tariff proponents. In general, they offer no justification for the claim except unsatisfactory profit levels. Low market prices are clearly not synonymous with predatory pricing. We can assure this Committee that surplus capacity and vigorous competition are all that's required to bring prices and profits down.

For illustration, we can outline the policy of PEMREF, the Saudi Arabian refinery in which Mobil has a 50% interest. The company buys crude at official Saudi prices. Each partner pays PEMREF for the products purchased based on the published spot market price either East or West of the Suez Canal less the cost of transportation from the refinery. In essence the PEMREF product is sold at the market, and with its sales much less than 1% of free world products, the refinery is not a significant factor in setting that market.

Similarly, gases feeding our part-interest Saudi petrochemical plant are purchased from a government agency at the established Government price for ethane. These gases, which were once mostly produced as an oil well by-product and flared, had zero value before the development of the Saudi Master Gas system. The price we pay reflects the cost of collecting, processing, and transporting the ethane to the plant. The price is the same as available to other Saudi economic development projects. The U.S. International Trade Commission in a report, released in the past few days, which reviewed the world petrochemical situation stated:

> "Although each nation is selling natural gas to domestic industries at prices below the world or potential export levels, Saudi Arabia is apparently selling at the highest price it can ...

> It would appear that Saudi Arabia's price for natural gas is reflective of a natural resource comparative advantage and not a pricing practice."

We cannot vouch for the internal arrangements of other export refiners, but we know of no refiner -- government owned or otherwise -- who sells at less than the spot market equivalent. Selling at the competitive market price is not always profitable, but it can hardly be labeled "unfair" or predatory.

An allied issue is the uneven and unfair application of existing tariffs which is an irritation to refiners and, we believe, the root cause of many of the refiner complaints you have been hearing. For example, identical gasolines and distillate may have very different tariffs depending on declared end use. Once the product enters the U.S., its actual use need not (and often does not) track the tariff declaration.

We strongly oppose protective tariffs designed solely to shield the industry from competition. In the short run, they tend to increase consumer costs unnecessarily and in the longer run they cost even more because they reward inefficiency and stifle innovation. Further, experience with the import quotas of the '60's and the price controls of the '70's has convinced us that in short order the tariff program would be riddled with exceptions and exemptions aimed at special interests.

Tariffs, such as those contained in legislation pending in the House of Representatives (H.R. 2354) could easily set off another chain reaction of market distortions. If the gasoline tariff were raised by as much as 7 or 8 cents, the market could respond by increasing naphtha imports and converting it to gasoline. If that "loophole" were closed, then even distillate and other products might be brought in and refined into gasoline. Before long, all products and crude oil would have to be included under the higher tariff. Market distortions can spread like a disease and the consumer ends up paying the cost. In this regard, we would only note that a 1 cent per gallon increase in the price of gasoline costs the public just about 1 billion dollars annually.

We also oppose the provision for retaliatory tariffs in the event it is determined that a resource input subsidy exists. We oppose it in part because we believe that unilateral action of the type contemplated is contrary to the spirit and procedures of the General Agreement on Trades and Tariff and is likely to result in retaliation against American business.

More fundamentally, we believe these proposed laws are necessarily so vague and uncertain that enforcement would be capricious. For example, H.R. 2345 would appear to provide countervailing tariffs to offset "cost savings resulting from such factors as the availability of abundant supplies, lower production costs or lower transportation costs." These are the elements of competition and economic efficiency, and a tariff would only be protecting us from progress.

H.R. 2345 also appears to provide for countervailing tariffs even when the product is sold at world market prices if the country maintains its internal domestic prices at lower levels. We cite this legislation as there is no comparable legislation pending before this Committee.

The definitions of resource subsidies are so vague that, if they were applied to U.S. industry, products utilizing price controlled natural gas or low cost electricity from TVA or hydro-generation plants could be determined to have resource subsidies. As regards the petroleum industry, we believe such legislation is virtually unenforcible and has the potential for considerable harm.

In summary, Mobil believes that the facts show that refined product imports are not and have not been a significant factor in the current economic shakeout of the refining industry, and they clearly do not constitute a national security problem. We see no evidence of predatory pricing or unfair competition which would justify the cost of retaliatory tariffs.

Supporting Statement

Natural Resource Issues

In general, provisions such as those included in H.R. 2451, H.R. 2354 and H.R. 2345 create arbitrary distinctions; are subject to abuse by protectionists; and are counterproductive to efforts toward regaining America's position in world trade. The provision to countervail alleged subsidies to the raw material costs of imported products should not be included in any bill because:

o It is inconsistent with international obligations under GATT in attempting to redefine what practices are considered subsidies; if enacted, it will product burdensome GATT implications through either retaliation or mirror legislation.

o The provision intrudes in the sovereign affairs of other countries by dictating prices they would have to charge domestic industry for natural resources.

o If the natural resource subsidy provision is enacted in the U.S., the EEC will surely enact mirror legislation to protect their domestic industry, thereby directly affecting exports from U.S. producers to Europe. For example, TVA electric power and price-regulated U.S. natural gas might become the basis for an exaggerated allegation of U.S. subsidy.

o The provision would have far-reaching trade and foreign policy implications which challenge the right of other nations to enter into the modern world of commerce and industry.

o The provision would be protectionist legislation and if enacted may result in less competitive U.S. industries and downstream manufacturers, and ultimately increase costs to the consumer.

Petroleum Refinery Capacity and National Security

This Committee has heard allegations that the U.S. is being flooded with foreign gasoline and other petroleum products which are forcing the closure of U.S. refineries and thereby threatening the nation's security. This contention is untrue: product imports are not out of line with historical experience, and the U.S. has refinery capacity far in excess of its needs.

Is the U.S. Being flooded with foreign petroleum products?

The facts certainly don't support any such a conclusion. Looking first at the overall picture, product imports are a little less than 13% of demand. That's up from a low of 10% in 1980, but a long way below the 1973 market share of 17%. We are all aware that 1973 marked the start of severe supply problems. Here is another major difference from 1973: the nation now has a very large excess of refining capacity. When you look at the volumes involved, it's even harder to believe import growth is a significant factor in the current market. Today the net product inflow, after deducting product exports, is about 1.5 million b/d.

That's up only 100 thousand b/d from 1980 and down 1.3 million b/d from 1973.

The following table shows, on a gross basis, that product imports are lower both in absolute volume (by 1 million barrels per day and in percent of supply (4.6 points) than in 1973. Even more relevant are the net import figures (i.e., imports less exports); down 1.3 million barrels per day and 6.6 share points. The figures for early 1985 look even better, but it is too early to judge the year due to seasonal factors; we will rely on 1984 and only note early 1985 data, where meaningful, in the following.

U.S. PRODUCT IMPORTS

(Thousand Barrels Per Day)

	Domestic Demand	Gross Product Imports	Product Exports	Net Product Imports	Imports as% Demand Gross	Imports as% Demand Net
1973	17,300	3,000	200	2,800	17.3	16.2
1974	16,700	2,600	200	2,400	15.6	14.4
1975	16,300	2,000	200	1,800	12.3	11.0
1980	17,100	1,700	300	1,400	9.9	8.2
1981	16,100	1,600	400	1,200	9.9	7.5
1982	15,300	1,600	600	1,000	10.5	6.5
1983	15,200	1,700	600	1,100	11.2	7.2
1984	15,700	2,000	500	1,500	12.7	9.6
4 mos. 1985	15,800	1,700	800	900	10.8	6.0

Source: DOE Petroleum Supply Annual/Monthly; API

Our net dependence on product imports is less than 10% today. In analyzing these gross import data, which include residual fuel oil, it should be mentioned that in the early 1970s, the U.S. was importing a much higher share of residual fuel oil. Since that time, residual fuel oil imports have dropped substantially as industry and public utilities switched to more secure domestic coal and nuclear supplies.

The mix of products has changed over time, residual fuel is down and gasoline and distillate imports are up. Focusing on gasoline and distillate-type imports, as shown in the next table, these imports increased in 1984 to 5.4% of demand for gasoline and distillate products. This may seem unfavorable when compared to the very low level of about 2.3% reached in 1980 when imports bottomed at the lowest percentage level of demand since 1968, but it is only a little higher than the level prevailing back in 1973-74. (January or February data from the Department of Energy look a bit better, but weekly data for some figures available for March, April and May indicate it is still too early to tell if 1985 will be much different than 1984.)

U.S. IMPORTS OF GASOLINE AND DISTILLATE-TYPE PRODUCTS

	Finished Motor Gasoline		Finished Distillates		Other Gasoline & Distillate Type Prod.	Total Gasoline & Distillates	
	TBD	% of Fin. Mogas Demand	TBD	% of Dist. Demand	TBD	TBD	% of Total Prod. Demand
1973	132	2.0	381	12.4	309	822	4.8
1974	203	3.1	290	9.9	260	753	4.5
1975	184	2.8	153	5.4	208	545	3.3
1980	139	2.1	142	5.0	110	391	2.3
1981	156	2.4	172	6.1	99	427	2.7
1982	197	3.0	93	3.5	143	433	2.8

1983	247	3.7	175	6.5	137	559	3.7
1984	292	4.4	270	9.5	290	852	5.4
2 mos.							
1985	275	4.2	210	6.1	313	798	5.0

Source: DOE Petroleum Supply Annual/Monthly

Thus, petroleum product imports, whether in total or by product categories, are not flooding into the U.S. There is ample historical precedent for the current level of imports. Yet, there is one major difference in today's industry status from the past -- the large volume of excess operating capacity as well as idled but unusable refinery capacity.

We believe that much of the refiner complaint with imports actually reflects dissatisfaction with unfair or uneven application of existing tariffs. Loopholes in the existing tariff structure encourage imports of gasoline blending components and alcohol blends. We believe that growth in imports of "Other Gasoline and Distillate Products" shown in the preceding table are, in part, the result of these loopholes.

For example, the tariff on finished gasoline is 1.25¢/gal; on naphthas and gasoline blend stocks, it is 0.25¢/gal. In many cases the only difference between naphtha or gasoline blend stock and gasoline is the "use" or name declared by the importer. Once the material enters the U.S., it is virtually impossible to determine its actual end use.

Gasoline and gasoline blend stocks containing ethanol enjoy another huge windfall under existing tariff application. When Congress elected to encourage the use of gasohol (a 10% blend of ethanol in gasoline), it exempted gasohol from 6¢/gal. of the federal excise tax on gasoline. (Some states provided similar exemptions from state tax.) Because the Government's objective was to develop a domestic ethanol industry, an offsetting duty of 60¢/gal. was imposed on imported ethanol. Under current tariff administration, the alochol component of gasoline or gasoline blend stock containing ethanol does not incur the 60¢/gal. tariff but does get the federal excise tax exemption. The result is a 6¢/gal. subsidy for imported gasohol.

We recognize that these loopholes are the subject of other pending legislation, but it is important to note it is our tariff administration and not foreign subsidy which encourages growth of these types of imported product.

Some interests have tried to raise alarm by alleging excess dependence on the Middle East for light product imports. But these nations, individual or collectively, do not rank in the top group of exporters to the U.S., as shown by the table below, nor are they likely to become major suppliers to the U.S. To put this in perspective: at the beginning of last year, the Middle East had 3.7 million barrels per day of capacity; it operated at about two thirds of utilization; and it shipped very little to the U.S. One major modern refinery came on stream in 1984, another in 1985, and possibly two or three more will in 1986 or 1987. This new capacity adds about 0.5 million barrels per day through 1985 and possibly another 0.5 million barrels per day in the out years. Saudi Arabia recently announced the cancellation of two refineries planned for its domestic markets. This may require diversion of other new production from the export market to a growing domestic market. The 1.0 million barrels per day of new capacity compares to 57 million barrels per day of 1984 operable capacity in the Free World.

1984 SUPPLIER SHARE OF U.S. IMPORT OF GASOLINE AND DISTILLATE PRODUCTS*

	%
Venezuela	23
Canada	13
Netherlands	11
Romania	6
China	5
Brazil	5
Mexico	5
Netherlands Antilles	4
Algeria	5

* Gross imports of gasoline blending components, finished motor gasoline, jet fuel, kerosene, distillates 1-4 and special naphthas per DOE Petroleum Supply Annual/Monthly.

Is capacity adequate for national security?

The national security would not be in danger of being impaired by a shortage of refinery capacity if the U.S. has enough capacity to run all the crude oil which might be available during an international supply disruption. By using two cases, which bracket the possibilities, capacity can be reviewed without getting into the guessing games about the cause and severity of the disruption. One case assumes all product imports are cut off, but existing crude supply is untouched and enough extra crude becomes available to replace the lost products. The other case assumes all crude oil and product imports are cut off, but U.S. crude is supplemented by a maximum rate SPR drawdown. In both cases there is more than enough refinery capacity to handle the job.

Before reviewing the statistical data, it is useful to clear up two minor misconceptions. First because the current U.S. refinery capacity of 15.5 million b/d is slightly below today's (1984 average) petroleum product demand of 15.7 million b/d it has been rather easy for those who would sound the national security alarm to claim that we are already short of domestic refining capacity, overly dependent on product imports and that the situation is getting worse because more refining capacity is being shut down each year. Nothing could be further from the facts.

A significant share of U.S. petroleum product demand is satisfied from sources other than crude and outside the refinery. Two major sources are gas liquids extracted from natural gas and ethanol production. Further, there is a substantial volume gain in our U.S. refineries when heavier crude oil is refined into gasoline, distillates and liquified petroleum gases. Thus, in 1984 our total U.S. petroleum demand of 15.7

million b/d was satisfied by 12.2 million b/d of input to refinery distillation units plus a 0.6 million b/d processing volume gain, 1.6 million b/d of domestic NGL and alcohol and 1.4 million b/d of net product imports.

Second, any consideration of U.S. refinery capacity and product needs must include Puerto Rico and the Virgin Islands. Puerto Rico and the U.S. Virgin Islands are almost universally excluded from aggregate data and analysis of the U.S. petroleum situation. Indeed, shipments to the mainland are considered U.S. imports in many official reports. However,these islands have oil refineries, are net exporters of product to the U.S.mainland and, in the event of an international oil crisis, would be encompassed within the domestic system mitigating the effect. These islands in 1984 account for approximately 300 TBD of reported net U.S. imports. The islands have about 3/4 of a million b/d of refinery capacity, including the 130 TBD in Corco's bankrupt Puerto Rican facility. Local consumption is about 1/4 of a million b/d. Thus, transfers of product back and forth to the mainland should not be considered as exports or imports and capacity on the islands should be included in the U.S. figures.

Two types of shutdown, but operable, refinery units are included in the U.S. data -- units within operating refineries and complete refineries. In 1984, refinery capacity which is shutdown, but capable of being brought back on stream in a fairly short time,was 1.6 million barrels per day. The Department of Energy's survey defines this "idled capacity" as those facilities (either a complete refinery or major segments of one) that have been shut down, but are capable of being put into operation in 30 days, or those facilities that are actively undergoing repair and can be put into use in 90 days. About 70% of this "idled capacity" consists of units within operating refineries.

The following table shows the key capacity and operating data with and without the consolidation discussed above,and capacity data with and without the idle, though operable, units and plants. (Early 1985 data indicate a bit more excess refinery capacity than the average 1984 figures, but seasonal and non-recurring factors, such as inventory changes, make conclusions tentative until more months are available.)

U.S. REFINERY CAPACITY SITUATION
WITH PUERTO RICO AND U.S. VIRGIN ISLANDS

(Million Bbl Per Day)

Refinery Capacity	U.S. Only		U.S. ± P.R. ± V.I.	
		2 months		2 months
	1984	1985	1984	1985
Operating	14.6	14.3	15.2	14.9
"Idle"	1.5	1.2	1.6	1.3
Total	16.1	15.5	16.8	16.2
Net Product Imports	1.5	1.1	1.3	0.9
Refinery Crude Input	12.2	11.5	12.6	11.9

The next table interprets the data in terms of the quantity of excess refinery capacity and utilization rates under three frames of reference. In part A the capacity situation is reviewed as it actually occurred; on average 4.2 million b/d of unused capacity was available to cover net imports of 1.3 million b/d.

As part B shows, if all product imports were cut off and somehow the extra crude were found and run to replace it, the U.S. would still have had 2.9 million b/d of unused capacity available and been operating at only 83% of capacity. In the most extreme case (Part C), a situation where refineries would be running only domestic crude (about 8.8 MMBD) and crude from the SPR oil (at the 1984 availability of 2.5 MMBD), if only mainland operating units were called upon, they would operate at about three-quarters capacity, and if the capacity of the islands and U.S. mothballed capacity were operating, utilization would be at only two-thirds capacity. The latter would appear to be a better basis for evaluating refinery capacity because if product imports were curtailed, it is highly likely that crude oil imports would also be cut off. But realism probably lies between the two cases because, under almost any conceivable scenario, crude and products from Western Hemisphere sources would remain available unless under International Energy Agency direction the U.S. agreed to divert all its foreign supplies.

MEASURES OF EXCESS REFINERY CAPACITY

1984

	U.S. Only		U.S., Puerto Rico and U.S. Virgin Islands	
	Excess MMBD	Utilization %	Excess MMBD	Utilization %
A. Actual				
1) Operating Units	2.4	84	2.6	83
2) All Units	3.9	76	4.2	75
B. Input Increase to Replace Net Imports				
1) Operating Units	0.9	94	1.3	91
2) All Units	2.4	85	2.9	83
C. Running Only Domestic and SPR Oil				
1) Operating Units	3.3	77	3.9	74
2) All Units	4.8	70	5.4	67

While it can be debated whether the U.S. had 2.9 or 5.4 million b/d excess refining capacity above and beyond what is needed in an international supply crisis, it is clear from these data that refinery capacity is more than adequate for the requirements of national security.

There can be no valid concern for national security until capacity drops below a level which can support all domestic demand, i.e. 13.9 million b/d including Puerto Rico and the Virgin Islands in 1984. More likely, if product imports were to be significantly interrupted, so would crude imports upon which we are even more dependent. Crude production is currently 8.8 million b/d and is much more likely to decline than increase as time goes on. But the SPR draw rate is planned to increase to 4.5 from the current 2.5 million b/d. Thus, in the extreme cutoff case, with every plant pressed into service, 13.3 million b/d of capacity would be required.

To summarize the refinery question, basic economics require that industry continue closing out-of-date, inefficient capacity while simultaneously making new investments in modern facilities. This is now happening in a free market. We see no national security reason to interrupt this process.

We are all aware that this is a most difficult time for the oil industry. There are surplus production and excess refinery capacity worldwide. Fierce competition has resulted in reduced or nonexistent profit margins in all phases of our business. Unlike the past, we cannot wait for market growth to solve our problems -- and we should certainly not look to government regulation to solve them.

On the contrary, the government controls of the past almost certainly contributed to today's problems. Had we not tried to suspend the free market with a decade of regulations, the current shakeout would almost certainly have occurred less dramatically and less painfully over the years.

Today's excess refining capacity is real, and it is producing some fundamental changes in our business. The Free World refining industry is in the middle of a substantial readjustment to changed market conditions. This derives from several factors. First, there was substantial building of capacity in the 1960s and early 1970s in expectation of rising demands. In the mid-1970s this expectation was again stimulated by U.S. crude oil price controls which kept consumer product prices artificially low and fostered demand. When demand dropped in the 1980s after the price jump in 1979 and the end of controls in the U.S. in 1981, the industry was left with massive overcapacity. Second, U. S. government actions in the 1970s, such as the entitlements programs, gave the wrong economic signals and encouraged many companies to build totally inefficient capacity merely to benefit from these government subsidies. We should be loath to believe a new market distortion in tariff form would perform any better.

Industry is already taking steps appropriate to the situation. Since 1980, there has been an approximate 17% reduction in United States refinery capacity and in Europe about 19% has shut down. Simultaneously, industry is investing billions of dollars to upgrade the remaining capacity in ways consistent with the changed product mix.

Unpleasant as it may be, refinery closures are an inevitable consequence of the free market. When supply exceeds demand, inefficient marginal plants become uneconomical. This is precisely how the American system of free enterprise is supposed to work, and it has worked very well in producing more goods and services at lower cost than anywhere else in the world.

Statement of

R. MICHAEL JOHNSON
Vice President
Oxbow Resources, Inc.

Submitted to the
Subcommittee on Energy Regulation
and Conservation

of the

Committee on Energy and Natural Resoures
United States Senate

June 4, 1985

Oxbow Resources, Inc. ("Oxbow") is a petroleum marketing company based in Boston, Massachusetts and Houston, Texas. Oxbow buys and sells a wide range of refined petroleum products in the United States, including gasoline, gasoline blending components, middle distillates and residual fuel oils. Its operations are conducted at the wholesale level and involve cargo lots as well as barge and pipeline quantities. Oxbow does not own crude oil production facilities or refineries, but it does maintain approximately 1 million barrels of product storage to supplement its blending and marketing activities.

Oxbow is a significant importer of refined petroleum products, including gasoline, distillate fuel oils and blendstocks. Continued access to imports from the world markets helps Oxbow compete with more powerful segments of the petroleum industry, including the major oil companies, and ultimately helps keep prices to consumers at the lowest possible levels. We are therefore vitally interested in the continued existence of open markets and free trade. We welcome this opportunity to present our views to the Subcommittee on the impact of petroleum product imports on the domestic petroleum industry.

I. Introduction

In recent months an increasingly vocal segment of the U.S. petroleum industry has begun calling for the introduction of protectionist barriers to imported products.[1/] The advocates of trade barriers, who by and large are independent refiners, contend that their viability is in jeopardy as a direct consequence of imports and that ultimately a "flood" of gasoline and blendstock imports (which now constitute only 5 to 7 percent of total U.S. demand), will result in the failure of refineries which are essential to the national security.

[1/] See, e.g., Testimony of John Hall, Chairman and CEO, Ashland Oil on behalf of Independent Refiners Coalition and Bill Tell, Jr., Senior Vice President, Texaco before the Subcommittee on Energy Conservation and Regulation, June 4, 1985.

Oxbow and independent marketers are customers of the many of the independent refiners who now call upon Congress for trade barriers. We would be among the last in the industry to wish to see these companies perish and among the first to suffer harm should this occur. We do not believe, however, that the refiners have made a case for new trade barriers. Even their recently released Pace Co. study must use far-fetched and unrealistic assumptions to reach the conclusion that gasoline and blending stock imports may grow by a meager 4 to 6 percent by 1990. Using realistic projections, The Pace Co. study concurs with the conclusions of the Department of Energy and others, that imports will not likely exceed current levels through 1990.[2/]

The real problems of the U.S. refining sector over the past few years have been due to changing economic and competitive circumstances -- including a substantial decline in demand and the elimination of a variety of federal subsidies that had encouraged the creation of numerous small and inefficient refineries. Perhaps more important, there is every reason to believe that the independent refining sector is

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[2/] "The Effect of Increasing Petroleum Product Imports on the United States Refining Industry," The Pace Co., May 30, 1985.

recovering and will be strong. There is certainly no evidence to suggest that it must be sheltered behind new tariffs when for every penny of gasoline tariff increase, the U.S. consumer will spend in excess of $1 billion.

As Deputy Energy Secretary Boggs and other Administration representatives have repeatedly testified, current import levels do not justify the imposition of protectionist measures when the consequence to U.S. consumers and the economic health of the nation are manifestly adverse. Current statistics and projections indicate that domestic refining capacity will be sufficient to meet national needs even in the event of an emergency. Indeed, it is hard to believe that any threat exists when this Administration, which has been so concerned with the national defense, discounts it. Therefore, there is no basis for the imposition of trade barriers which will inevitably distort world crude and products markets and jeopardize positive trade relationships with countries such as China, Canada, Mexico and Venezuela.

II. The Refining Industry Today

Prior to 1981, when President Reagan ordered the decontrol of the petroleum industry in the United States,[3]

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[3] Executive Order 12287, 46 Fed. Reg. 9909 (Jan. 30, 1981).

the domestic refining industry had been insulated from competition in the world market by federal programs dating back to the 1950s. These programs included the oil import quotas and license fees,[4] and, beginning in 1974, price controls with their entitlements subsidies and notorious "small refiner bias."[5] These protectionist measures fostered inefficiency and misallocation of capital and labor resources in the petroleum industry generally and in the refiner segment in particular.[6] Government intervention likewise distorted domestic crude oil and product demands and supplies and resulted in higher prices for the consumer.[7]

In stark contract to this history, the more recent results of decontrol and a free domestic market in oil and

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4/ *See*, 22 *Fed*. *Reg*. 6804 (Aug. 22, 1957); 22 *Fed*. *Reg*. 12772 (Dec. 12, 1957); Exec. Order No. 10761, 23 *Fed*. *Reg*. 2067 (March 28, 1958); Proc. No. 3279, 24 *Fed*. *Reg*. 1781 (March 12, 1959) (establishing the Mandatory Oil Import Program); Exec. Order 11588, 36 *Fed*. *Reg*. 15727 (Aug. 17, 1971) (establishing import price controls); Proc. No. 4210, 38 *Fed*. *Reg*. 9645 (April 19, 1973) (eliminating the quota system and establishing the license fee system).

5/ *See generally* 10 CFR § 211.67 (1976).

6/ *See generally* D. Bohi and M. Russell, *Limiting Oil Imports: An Economic History and Analysis* (1978); J. Griffin and H. Steele, *Energy Economics and Policy* (1980); J. Kalt, *The Economics and Politics of Oil Price Regulation: Federal Policy in the Post-Embargo Era* (1981).

7/ *Id*.

refined products have been extraordinarily beneficial to the nation's economic health. The decline in crude oil prices in the world market, which is projected to continue throughout this decade,[8] has been passed through to the domestic economy through a competitive petroleum market unconstrained by government-imposed controls. In turn, a highly competitive petroleum market helped fuel a general economic recovery and afforded the consumer the benefit of lower refined product prices.[9]

As beneficial as these developments were for the country as a whole, they necessarily produced a period of adjustment for the independent refining sector. Between 1973 and 1981, the number of domestic refineries artificially ballooned from 281 to 324 and capacity increased from 13.7 MMB/D to 18.6 MMB/D.[10] With the removal of federal controls and subsidies in 1981, approximately 100 older, smaller and less efficient plants were shut down either temporarily or permanently.[11]

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[8] Annual Energy Outlook 1984, Energy Information Administration, Department of Energy (1985).

[9] See e.g., The New York Times, February 22, 1985 at 1 and Testimony of Professor Edward W. Erickson before the International Trade Commission, Investigation No. 332-203, March 7, 1985.

[10] U.S. Crude Oil Refining Capacity, American Petroleum Institute Basic Data Book, Vol. V, No. 1 (1985).

In addition, this artificially-induced increase in capacity was ultimately overtaken by a substantial decline in domestic demand for petroleum products. Demand for petroleum products generally is down from a 1978 high of 18.8 MMB/D to approximately 15.7 MMB/D today, while demand for gasoline which peaked in 1978 at 7.4 MMB/D has decreased to an average 6.6 MMB/D for the first quarter of 1985.[12] The inevitable consequence of a permanent reduction in consumption is a corresponding reduction in refining capacity.

Finally, at the time of decontrol, some refiners elected to make substantial investments in new facilities capable of upgrading heavy, high-sulfur crude oils into lighter products such as gasoline. This complex processing capability was intended to take advantage of what was then a substantial differential between the cost of light and heavy crude oil and the price of light and heavy refined products. While the new facilities are highly sophisticated and efficient, their success depended upon a continuation of these price differentials. In fact, however, over the past two years, light and heavy crude costs have tended to converge as has the price commanded by light and heavy products.[13] The result, until very recently, has been a squeeze on refiner margins.

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[11] Id.

[12] Crude Oil and Petroleum Products Overview, Finished Motor Gasoline Supply and Disposition, Monthly Energy Review, Energy Information Administration, Department of Energy, February 1985 (hereafter Monthly Energy Review).

In recent months, however, refiners' financial performance has improved dramatically in the face of declining crude costs, increased gasoline prices and somewhat higher demand. As customers of these refineries, we feel confident that they will survive. For example, Ashland, one of the most vocal supporters of product imports, has shown a 24.2 percent increase in earnings during the first half of 1985 over 1984.[14] Ashland CEO John Hall noted in an interview with The Oil Daily that the company's improved performance "began . . . in late February as OPEC contained its crude production, which led to a better balance between supply and demand." Mr. Hall also commented that Ashland's "[m]argins continued to rise substantially during March and April and we are cautiously optimistic for the remainder of the year."[15]

13/ Refiner and Gas Plant Operator Sales Prices of Residual Fuel Oil, Refiner and Gas Plant Operator Sales Prices of Petroleum Products for Resale, and FOB Cost of Crude Oil Imports From Selected Countries, Monthly Energy Review.

14/ The Oil Daily, April 24, 1985, at A-7.

15/ Id., at A-8.

Tosco, another strong supporter of import restrictions, stated in May that its "margins have improved considerably in the past 60 days and that the company expected 'sharp improvement' in second quarter results . . . ."[16] Tosco also reported the sale of its troubled refinery at El Dorado, Arkansas to Lion Oil Co.

Similarly, Valero Energy/Saber Refining is expecting to run its sophisticated 70,000 barrel per day refinery at maximum capacity as a result of investments by Saudi Arabian businessman Akram Ojjeh's Luxembourg-based company, Techniques d'Avant Garde (TAG).[17] Because of heavy debt service costs, incurred to construct the industry's most advanced, state-of-the-art facility, Saber needs to attain a minimum differential of $6 per barrel between the cost of its feedstock and the price at which it can sell its refined product.[18] The recent drop in spot crude prices undoubtedly has helped Saber's position, although it obtains most of its crude supply through a long-term contract with Venezuela.

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[16] The Oil Daily, May 10, 1985, at 8.

[17] The Oil Daily, March 25, 1985, at B-19.

[18] Id.

Diamond Shamrock's refined product sales were up 9.2 percent in 1984 and downstream profits climbed 22.7 percent from 1983's $66 million to $81 million in 1984.[19] Crown Central's losses in 1984 hid its fourth quarter gain of $13.6 million up from $7 million in the fourth quarter of 1983.

These improvements in performance have occurred despite relatively flat trends in imports. What has changed, however, are the relative prices of crude and refined products coupled with some increase in U.S. consumption of gasoline, even at slightly higher prices. This evidence leads to the conclusion that recent levels of imports have been more a result of the domestic refining industry's problems than a cause. Accordingly, there is no need to impose trade barriers against them. Moreover, as shown below, trade barriers are not needed to protect national security.

III. Current Refining Capacity Is Sufficient to Meet National Security Needs

The advocates of trade barriers have claimed that the reduction in domestic capacity from the artificially inflated levels of the 1970's has placed the United States on the verge of a national crisis. These claims fall totally wide of the mark and indeed have little if any factual basis.

19/ The Oil Daily, March 25, 1985, at B-8.

Both Undersecretary of Energy Danny Boggs and Frederick Gerlach, of the State Department's Office of Energy Producing Countries[20/] have made clear the Administration's view that proponents of restricting products because of national security considerations have yet to prove their case. In testimony before both House and Senate Subcommittees,[21/] Boggs noted that current U.S. domestic refining capacity remains approximately equal to the entire U.S. demand for oil products.

U.S. refining capacity is now approximately 15.6 MMB/D.[22/] This is far more than the capacity needed to meet current demand, about 13.1 MMB/D, even if all imports were terminated.[23/] Moreover, the refinery utilization rate in

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20/ See, Platt's Oilgram News, May 28, 1985 at 3.

21/ See, Testimony of Danny J. Boggs, Deputy Secretary of Energy, before the Subcommittee on Environment Energy and Natural Resources, House Committee on Government Operations, April 24, 1985; and before the Subcommittee on Energy Conservation and Regulation, Senate Committee on Energy and Natural Resources, June 4, 1985.

22/ Id.

23/ F. Fesharaki and D. Isaak, The Changing Structure of World Refining Industry: Implications for U.S. Energy Security, Resource Systems Institute, East-West Center (1985) (hereafter East-West Center Study).

the U.S., at 76 percent[24/] the highest since 1979, provides a comfortable cushion in the event of a disruption in the imports of foreign product. This utilization rate has increased to its current level from of a low of 68.5 percent in 1981.[25/] It is now slightly higher than the average standard utilization level worldwide, reflecting the equalizing effect of international competition.

While much has been made of the potential threat to U.S. refiners from newly-constructed refineries in the Persian Gulf, including a refiners'-sponsored study by The Pace Co.,[26/] the facts indicate that these concerns are unwarranted. The Pace study has taken a number of unlikely assumptions and combined them to draw the conclusion that domestic refiners will suffer grave consequences from the new OPEC refinery capacity absent high barriers to imports.

The study begins by assuming that the U.S. is the only market in the world open to imports of refined products and that the new Middle East refineries will operate continuously

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[24/] Platt's Oilgram News, May 16,1985 at 3.

[25/] Lundberg Letter, Vol. XI, No. 23, March 23, 1984.

[26/] "The Effect of Increasing Petroleum Product Imports on the United States Refining Industry," The Pace Co., May 30, 1985.

at maximum capacity. Based on these self-fulfilling assumptions, the study concludes that imports of gasoline and middle distillates could reach between 12 and 13 percent of total U.S. demand by 1990, depending on the country's level of economic activity.[27] Upon examination, it is clear that these assumptions are faulty.

First, the total capacity of the new refineries is only 800,000 barrels per day, approximately 5 percent of U.S. consumption.[28] Furthermore, in a world of excess refinery capacity, it is unlikely that these new plants would operate at maximum capacity.

Second, given the current glut in the refined products market, it is unlikely that OPEC producers would be able to penetrate that market without undercutting the price and production quotas established for the primary OPEC commodity -- crude oil. Some experts believe that OPEC's push into the products markets may undermine both its short- and long-term interest in the stability of the crude markets.[29] Ultimately, the price of crude would be forced down even further, benefiting non-OPEC refineries.

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[27] Id. at Table 6.

[28] East-West Center Study.

[29] Oil & Gas Journal, May 27, 1985 at 25.

Third, the chances of Europe's completely closing its doors to product imports are slim. In addition, Japan is being urged both by the U.S. and OECD nations to open its markets to refined products. Recent press reports also indicate that officials of Petromin, which supplies a substantial quantity of crude to Japan, have met with Japanese officials to encourage their participation in the products market. There are indications that some liberalization in Japan's policy may be seen by early to mid-1986.[30/]

Finally, the new OPEC capacity is far more likely to displace less efficient, foreign refineries than U.S. capacity. The most probable victims of the new Middle East facilities are the so-called class "C" refineries -- those that depend upon imported crude oil for feedstock and on export sales of products in foreign markets -- including plants in Aruba, Curacao and Singapore. The closing of these older and less sophisticated refineries will reduce the worldwide oversupply of capacity and enhance the efficiency of the global refining market. Complex, efficient and sophisticated U.S. refining capacity will be well positioned in this competitive environment.[31/]

30/ Platt's Oilgram News, May 23,1985 at 1.

31/ East-West Center Study.

IV. Current Import Suppliers Are Friendly U.S. Trading Partners

The refiners' national security case is premised on a scenario in which all product imports would be terminated --an utterly remote possibility. The vast majority of imports -- about 98 percent -- are supplied by friendly U.S. trading partners. A massive disruption in product imports is, therefore, unlikely. Perhaps more important, however, is the fact that the imposition of protective measures could have significant repercussions on otherwise positive U.S. international trade relations.

Current imports are supplied by approximately 40 countries.[32/] Thirty-seven percent of all imports come from U.S. possessions or U.S.-owned refineries in the Caribbean.[33/] Almost 21 percent are imported from other OECD nations, with the Netherlands and Canada accounting for over 15 of the 21 percent. Venezuela supplies the U.S. with about 15 percent of total product imports. Only 2 percent, or 0.2 percent of U.S. consumption is supplied from Persian Gulf OPEC

[32/] Id.

[33/] Id. and Independent Refiners Coalition data.

nations.[34] As noted, even with new onstream OPEC capacity, this percentage is unlikely to increase significantly.

Erecting protectionist import barriers will have significant repercussions on our trade relations with the rest of the world. In addition to the general dislocation in world oil markets that would result if the world's largest product consumer were to close its doors, there would be a distinctly adverse effect on bilateral trade relations with major product suppliers such as Canada, Mexico, and China, on whom we also depend for supplies of crude oil.

V. Proposed Product Import Barriers Will Cause Serious Injury to U.S. Consumers and the U.S. Economy

Legislation recently introduced in Congress would increase gasoline and blendstock tariffs by more than 9¢ per gallon. Should Congress adopt trade barriers of this magnitude, many if not all current gasoline imports will likely be barred in order to prop up a few U.S. refiners who might ultimately be faced with reducing gasoline production or closing marginal plants. The consequences of these actions for U.S. consumers, however, are substantial and entirely adverse.

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[34] Id.

It has been estimated that every penny added to the price of gasoline through increased tariffs represents an additional $1 billion in direct costs at the pump. Thus an increase of 9¢ per gallon amounts to a $9 billion economic burden.

Prohibitive tariffs carry other hidden and indirect costs as well: waste of crude oil, higher capital and other input costs and a generally inefficient economic allocation of resources. In economic terms, the misallocation will result in a "consumption loss" because a higher-priced domestic product will be substituted for a lower-priced import. Essentially, the economy would be getting less value for its money.

At the same time, the economy will suffer a "production loss" because resources will be allocated to higher cost production and away from the lower cost production of alternative goods. Employing domestic resources in areas where others may have a comparative cost advantage reduces the nation's ability to produce lower-cost goods for domestic consumption and export and lowers the country's real income.

The serious consequences of artificial distortion of energy markets are well-known. Because energy plays such a key role in the economic system, a highly competitive market helps to keep inflation down. By the same token, an artificially constrained market will fuel inflation and prevent real economic growth.

VI. Conclusion

When the independent refiners began their campaign for protectionist subsidies, there was a general consensus that they would have a heavy burden to demonstrate the need for such controls. They have failed to make their case. We urge the Congress to withhold further action.

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